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June 1, 2005

Via Federal Express - Overnight Delivery

Clerk of the Board
Environmental Appeals Board
US Environmental Protection Agency
1341 G Street NW, Suite 600
Washington DC 20005
Phone (202) 233-0122

Re: Petition for Review of Nevada Department of Environmental
Protection's Final PSD Air Quality Operating Permit To Construct #
AP4911-1349 for Newmont Nevada Energy Investment, LLC's TS
Power Plant

Dear Clerk of the Board:

Enclosed are one original and five copies of the Association for Clean Energy's
Petition for Review of Nevada Department of Environmental Protection's Final PSD
Air Quality Operating Permit To Construct # AP4911-1349 for Newmont Nevada
Energy Investment, LLC's TS Power Plant and supporting brief.

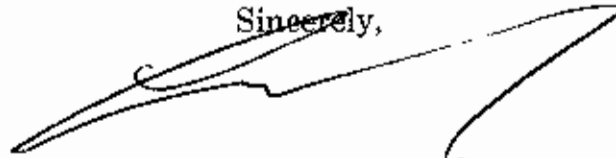
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June 1, 2005
Page 2

Please call me at (650) 589-1660 if you have any questions. Thank you in advance for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lionel P. Brazil', written over the word 'Sincerely,'.

Lionel P. Brazil

:lb

Enclosures

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BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

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ENVIR. APPEALS BOARD

IN THE MATTER OF
NEWMONT NEVADA ENERGY
INVESTMENT, LLC
PSD Permit No. AP4911-1349

PSD APPEAL No.

PETITION OF
ASSOCIATION FOR CLEAN ENERGY
AND ITS MEMBERS

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PETITION FOR REVIEW

Association for Clean Energy respectfully petitions the Environmental Appeals Board pursuant to 40 C.F.R. Part 124 to review the Prevention of Significant Deterioration permit issued to Newmont Nevada Energy Investment, LLC (Newmont) (No. AP4911-1349) (attached as Petitioner Exhibit A). Nevada Division of Environmental Protection, Bureau of Air Pollution Control (NDEP) issued Newmont this PSD permit to build a 200 megawatt (MW) coal-fired power plant pursuant to a delegation agreement with the U.S. Environmental Protection Agency (USEPA).

If constructed as currently permitted, the plant may set a precedent for six other coal-fired power plants being proposed in Nevada and 30 coal fired power plants being proposed Nevada, Idaho, Montana, Wyoming, Colorado, Arizona and New Mexico.¹

Petitioners seek review of the Newmont permit for multiple procedural and substantive failings, mostly involve the failure of the State to require Newmont to install Best Available Control Technologies. Many of this permit's failings are common among other coal plant proposals in the Western United States. By reviewing this permit the Board could provide regulators, power producers, and the public guidance before other air quality permits are developed and keep attention focused on the importance of Clean

¹ *Importing Power Fostering Pollution*, San Francisco Chronicle, May 15, 2005, <http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2005/05/15/COAL.TMP>.

Air Act protections to reduce air pollution and preserve pristine air in the West.

STATEMENT OF FACTS

Newmont submitted a revised application for a PSD permit to build a 200 MW coal-fired power plant in Eureka County, Nevada on October 5, 2004. See Pet. Ex. B. NDEP issued a review of the permit application and a draft PSD permit on October 28, 2004. See Director's Review and Draft Permit, Pet. Ex. C. On December 3, 2004, Petitioner submitted extensive and detailed comments on the draft permit with technical assistance from Dr. Phyllis Fox and Camille Sears. See Letter from Tanya A. Gulesserian on behalf of Association for Clean Energy (ACE) to Michael Elges, NDEP (December 3, 2004) ("ACE Comments") (attached as Pet. Ex. D).

Two agencies of the federal government also commented on the draft permit. In a December 6, 2004 letter, the USEPA formally notified the NDEP that it had reviewed the draft permit and enclosed comments on the draft permit. Letter from Gerardo Rios, USEPA, Region IX, to Michael Elges, NDEP ("USEPA Comments") (attached as Pet. Ex. E); see also Letter from Michael Elges, NDEP, to Gerardo Rios, Chief, USEPA (May 5, 2005) ("Responses to USEPA Comments") Pet. Ex. F. The National Park Service (NPS) also submitted comments on the draft permit. Letter from John Bunyak, NPS, U.S. Department of Interior, to Michael Elges, NDEP (December 6, 2004) ("NPS Comments") (attached as Pet. Ex. G); see also

Letter from Michael Elges, NDEP, to John Bunyak, NPS, U.S. Department of Interior, (May 5, 2005) ("Responses to NPS Comments") (attached as Pet. Ex. H).

On May 5, 2005, NDEP formally notified ACE it had issued Newmont a final PSD permit and provided the final permit and responses to ACE's comments, as well as to USEPA's and NPS's comments. Letter from Michael Elges, NDEP, to Tanya A. Gulesserian and Responses to Comments ("Responses to ACE Comments") (attached as Pet. Ex. I).

JURISDICTION AND STANDING

On June 8, 2003, USEPA and NDEP entered into a partial Delegation Agreement to issue Federal PSD permits. See Pet. Ex. P.² USEPA Region 9 officially delegated partial authority to the State of Nevada to implement and enforce the federal PSD program on September 8, 2003. (68 Fed. Reg. 52837). NDEP is delegated to implement and enforce the Federal PSD regulations in 40 C.F.R. § 52.21 for any new major stationary source. Id. In turn, 40 C.F.R. § 52.21(q) obligates Nevada to "follow the applicable procedures of 40 C.F.R. Part 124 in processing applications under this section." As part of this delegation agreement, NDEP must also follow

² Agreement for Delegation of the Federal Prevention of Significant Deterioration (PSD) Program by the USEPA, Region 9, to the Nevada Division of Environmental Protection (effective July 1, 2003).

USEPA's new source review guidance, as set forth in EPA's *New Source Review Workshop Manual* (NSR Manual).³

PSD permits issued pursuant to a delegation agreement are considered federally-issued permits for purposes of Board review. 40 C.F.R. § 124.41. The Board is authorized under part 124 regulations to review "any conditions of [a final PSD] permit decision." 40 C.F.R. § 124.19(a).

The Petitioner has standing as defined by 40 C.F.R. § 124.19(a) because its representative participated in the permit process by filing timely comments. Each issue discussed below was raised with NDEP during the public comment period or involves a new issue not previously subjected to public review. Consequently, the Board has jurisdiction to hear Petitioner's timely request for review of the following issues involving Newmont's PSD permit.

STANDARD OF REVIEW

The Board will review a PSD permit where the actions of a permitting authority were based on (1) a finding of fact or conclusion of law that is clearly erroneous; or (2) an exercise of discretion or important policy consideration that the Board should, in its discretion, review. 40 C.F.R. § 124.19(a)(1)-(2). In addition, the Board will remand a permit where a permitting agency fails to respond to significant comments or fails to issue a

³ USEPA, *New Source Review Workshop Manual. Prevention of Significant Deterioration and Nonattainment Area Permitting*, Draft, October 1990. The Board looks to USEPA's NSR Manual as USEPA's interpretation of certain PSD issues. See *In re Kawaihae Cogeneration Project*, PSD Appeal Nos. 96-9, 96-10, 96-11, 96-14, and 96-16, slip op. at 9, fn.11 (EAB, April 28, 1997), 7 E.A.D. 107.

complete response to comments at the time the permit was issued. See In re Prairie State Generation Station, PSD Appeal No. 05-02 (EAB, March 25, 2005); In re Amerada Hess Corp. Port Reading Refinery, PSD Appeal No. 04-03 (EAB, Feb. 1, 2005).

ARGUMENT

I. THE FINAL PERMIT DOES NOT REQUIRE BACT

The final permit does not require BACT for NO_x and condensable particulate matter (PM) emissions from the pulverized coal-fired boilers. The facility is a major Class I stationary source. Under the Clean Air Act, the facility must use the "best available control technology" for all pollutants that exceed the Clean Air Act's significance thresholds. 40 C.F.R. § 52.21(j)(2); see also 40 C.F.R. § 52.21(b)(23) (significance thresholds).

In this case, since emissions exceed the significance thresholds for PM, PM₁₀, NO_x and SO₂, BACT is required. However, the draft Permit does not require BACT for all emission units and pollutants.

The final permit and NDEP's responses to comments are inconsistent with the definition of BACT. BACT means:

[a]n emission limitation...based on the maximum degree of reduction of each pollutant...which the permitting authority, on a case-by-case basis...determines is achievable for such facility through application of production processes or available methods, systems and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.

42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12). USEPA's NSR Manual

describes the BACT determination process. This process, referred to as the

top-down process, should be faithfully followed. See Alaska v. US EPA, 298 F.3d 814 (9th Cir., July 30, 2002) (“[a]lthough the top-down approach is not mandated by the Act, if a state purports to follow this method, it should do so in a reasoned and justified manner.”). In this case, the top-down method was not consistently followed.

The top-down BACT determination process consists of five steps:

1. Identify all control technologies (including lowest achievable emission rate or LAER);
2. Eliminate technically infeasible options;
3. Rank remaining control technologies by control effectiveness;
4. Evaluate the most effective control and document results; and
5. Select BACT.

NSR Manual, Section B and Table B-1. In short, the top-down process requires that *all* available control technologies be ranked in descending order of effectiveness. Id. The most stringent, or top, alternative is BACT, unless the applicant demonstrates, and the permitting authority in its informed judgment agrees, that technical considerations, or energy, environmental or economic impacts justify a conclusion that the most stringent technology is not “achievable” in that case. NSR Manual at p. B.2.

Petitioner filed comments demonstrating that lower emission rates than those proposed in the draft permit were achievable. NDEP’s responses to these comments are conclusory, contain factual and legal errors, and raise issues of national policy.

These issues cross cut more than one regulated pollutant and others that relate to a specific pollutant. In NDEP's BACT analysis it:

- Provided conclusory, unsupported, post hoc rationalizations for proposed limits;
- Required that BACT limits be "achieved" rather than "achievable;"
- Eliminated valid data sources; and
- Improperly excluded periods of startup and shutdown.

Set forth below is a discussion of these issues as they pertain to each pollutant.

A. BACT Was Not Determined Properly For NOx Emissions From The PC Boiler

The final permit sets BACT for NOx emissions from the pulverized coal-fired boiler ("PC boiler") as an emission limit of 0.067 pounds per million Btu (lb/MMBtu) based on a 24-hour rolling average, achieved using selective catalytic reduction (SCR) and low NOx burners with over fire air. Pet. Ex. A, Final Permit, Sections V.A.1.a.(3) and V.A.2.a.(11). This limit is not BACT, because 1) it relies on limits that have been "achieved," rather than the lowest emission limit that is achievable, 2) substantial evidence shows that BACT for NOx is lower than 0.067 LB/MMBtu, and 3) it is not based on the maximum degree of reduction that is achievable.

1. NDEP's Reliance on Achieved, Rather Than Achievable, Limits Is Clear Error

Petitioner commented that emission limits must be *achievable*, not *achieved*, in order to satisfy BACT, and that lower NOx limits are achievable. Pet. Ex. D, p. 5.

In response, NDEP stated that "to be achievable for a 24-hour period, the achievability must be *demonstrated* for an extended length of time (for example, one year) on all 24-hour periods during that year." Pet. Ex. I, Responses to ACE Comments, p. ACE-8. That is, the emission rate must be achieved, not achievable. The Application identified feasible NOx control technologies and ranked them according to NOx emission limits, concluding that the lowest such limit was 0.07 lb/MMBtu. Pet. Ex. J, Appendix 10, p. 10-5, Table 10-2. The BACT analysis then proposed 0.067 lb/MMBtu on the basis that the applicant believes it can be achieved. Ap., p. 10-7. This is legally erroneous.

NDEP's interpretation of BACT misconstrues the legal definition of the term. The definition of BACT requires that emission rates be "achievable." 40 C.F.R. § 52.21(b)(12). The plain language, "achievable," rather than "achieved," is the technology forcing component of BACT. "Achieved," on the other hand, means accomplished in the past. "Achievable" means capable of being accomplished in the future. BACT can only move pollution control technology forward if emission limits are set stringent enough to force companies to try new approaches and do something different from the "same old." See e.g., Alabama Power v. US EPA, 636 F.2d 323, 372 (D.C. Cir. 1980).

An "achievable" limit is only constrained by energy, environmental, and economic impacts and other costs." 40 C.F.R. § 52.21(b)(12). Nothing in the plain language of the definition of BACT contemplates eliminating

candidate BACT limits because an emission rate has not been “achieved” or “demonstrated over an extended length of time”. The BACT emission rate need only be “achievable,” based on engineering judgment.

2. There Is Evidence That BACT For NO_x Is Lower Than 0.067 LB/MMBTU

Petitioner commented that lower NO_x limits than 0.067 lb/MMBtu are “achievable,” and provided voluminous evidence, including the following:

- a) The Desert Rock Energy Facility’s proposed BACT limit for NO_x of 0.06 lb/MMBtu based on a 24 hour average,
- b) A USEPA report for the Baldwin Generating Station concluding that BACT for NO_x is 0.015 lb/MMBtu based on a 3 hour average,
- c) The Texas Commission’s conclusion and inclusion in its State Implementation Plan that BACT for NO_x is 0.03 lb/MMBtu,
- d) A Georgia Department of Natural Resources Letter and Babcock & Wilcox Paper Concluding that BACT for NO_x is 0.008 lb/MMBtu for western Powder River Basin (PRB) coal,
- e) Foreign operating experience establishing that BACT for NO_x is less than 0.05 lb/MMBtu, and
- f) USEPA, Region 3, comments on the Longview Power Plant that BACT for NO_x is 0.04 lb/MMBtu based on a 24-hour average.

Petitioner's comments, NDEP's failure to adequately respond to these comments and the final permit's lack failure to require BACT for NO_x are discussed in detail below.

a. Desert Rock Energy Facility Evidence That BACT For NO_x Is 0.06 lb/MMBtu

The application for the Desert Rock Energy Facility in New Mexico, which is being permitted by EPA Region 9, concluded that BACT for NO_x for a sub-bituminous coal is 0.06 lb/MMBtu based on a 24-hour average. Pet. Ex. D, Ex. 1.⁴ Petitioners' commented that the Newmont BACT analysis must explicitly evaluate this limit, and explain why it is not applicable to Newmont.

NDEP's response constitutes clear error. First, NDEP erroneously points to a caveat on page 4-3 of the Desert Rock application, which states that permitted emission levels may need to be adjusted depending on the coal type. Response to Comments, p. ACE-4. However, the actual BACT determination is on page 4-9, and it provides no such caveat in concluding that BACT for NO_x is 0.06 lb/MMBTu based on a 24-hour average. Pet. Ex. D, Ex. 1, p. 4-9. In fact, the Desert Rock application concludes, "[b]ased on a review of available control technologies for emissions of NO_x from a pulverized coal-fired boiler, as well as 20+ years of Steag field experience and expertise in the application of SCR to coal-fired boilers, we conclude that the lowest NO_x emission rate...is 0.06 lb/MMBTu as a 24-hour average." Id.

⁴ ENSR Corporation, Application for Prevention of Significant Deterioration Permit for the Desert Rock Energy Facility, May 2004.

Second, NDEP argued that BACT is determined by looking at recently permitted facilities with higher NOx limits. Pet. Ex. I, Responses to ACE Comments, p. ACE-4. A higher limit at a permitted facility does not establish BACT, but rather a lower limit establishes BACT. Pointing to higher emission limits runs counter to the fact that BACT is "best" and the top-down process used to identify BACT picks the "top" control alternative (achieving the lowest emission limit) with no adverse energy, environmental, or economic impacts. See, e.g., NSR Manual, p. B.25.

Matt Haber, a BACT expert in USEPA Region 9, for example, established a BACT emission level that "appears to be somewhat lower than limits in recently issued PSD permits.... However, as I have shown above, it is readily achievable using currently available controls..." Pet. Ex. D, Ex. 4, p. 50. Responding to Petitioner's evidence of lower achievable emission limits by merely pointing to permits with higher limits is not responsive.

The NDEP also implies that permits are the only valid source of BACT information. However, permits are only one of the sources that should be consulted to determine BACT. The NSR Manual indicates that other sources of information should be considered in setting BACT limits, including foreign experience, lower polluting processes, innovative technologies, vendor information, and journal articles, among others. See, NSR Manual, pp. B.5, B.11, B.12-14. The EPA routinely directs applicants to the applications of others as sources of BACT limits. See, e.g., EPA's comment letter in the

Thoroughbred Generating Station case (see Pet. Ex. O) and EPA's database cited in NDEP's responses to comment. See Pet. Ex. J, Ap., Appx. 10, Table 10A-2. Limits disclosed in applications are routinely relied on to set BACT, because they represent an applicant's assessment, based on quotes from their vendors, as to what is achievable. In the case of Desert Rock, the applicant asserts a NOx emission limit of 0.06 lb/MMBtu based on a 24-hour average is achievable based on its 20+ years of experience. Pet. Ex. D, Ex. 1, p. 4-9.

Like Desert Rock, Newmont will fire a sub-bituminous coal. The Desert Rock BACT analysis concluded that "[n]o adverse cost, energy, or environmental impacts have been identified that would prevent the proposed project from continuously achieving 0.06 lb/MMBtu as a 24-hour average." Pet. Ex. D, Ex. 1, p. 4-9. Both Newmont and NDEP were aware of Desert Rock and its lower NOx BACT level. Pet. Ex. L: DeBurle 6/18/04.⁵ The same permitting consultant, ENSR, prepared both permit applications.⁶ In fact, based on the discussion in the Desert Rock Application, Newmont should be able to achieve an even lower NOx emission rate than Desert Rock, because the nitrogen content of PRB coals is lower than the nitrogen content of New Mexico sub-bituminous coal. Pet. Ex. D, Ex. 1, p. 4-5.⁷

⁵ E-mail from M. DeBurle, Nevada Bureau of Air Pollution Control, to Glen King, Newmont, Re: Comments on NNEI BACT Analysis, June 18, 2004.

⁶ ENSR prepared Desert Rock's PSD Permit Application in May 2004 and Newmont's in October 2004. See, ENSR Corporation, Application for Prevention of Significant Deterioration Permit for the Desert Rock Energy Facility, May 2004; ENSR Corporation, TS Power Plant Revised Class I-B Operating Permit to Construct Application, Newmont Nevada Energy Investment LLC, Carlin, Nevada, October 2004.

⁷ NDEP responded that the Desert Rock Application does not address nitrogen. However, Petitioner only cited the wrong page to the evidence. In fact, the evidence is Petitioner's

b. Haber Report Evidence That BACT For NO_x Is 0.015 lb/MMBtu

Petitioners submitted evidence into the record that Matt Haber, a BACT expert in USEPA Region 9, prepared a BACT analysis for the Baldwin Generating Station in Illinois and concluded that BACT for NO_x for Unit 3 as of 2002 was 0.015 lb/MMBtu for a new unit and 0.020 lb/MMBtu for a retrofit unit, based on a 3-hour average, achieved using low-NO_x burners, SCR, and a combustion optimization system.⁸ Pet. Ex. D, Ex. 4: Haber 4/02,⁹ p. 50. Like Newmont's proposed facility, this unit fires low-sulfur PRB coal. According to the report, this limit could be adjusted as high as 0.04 lb/MMBtu if a lower limit was demonstrated to be unachievable. Pet. Ex. D, Ex. 4: Haber 4/02, pp. 3, 50.

In response, NDEP claimed that "Mr. Haber's document has been reviewed in detail." Response to Comments, p. ACE-6. However, NDEP then incorrectly states that "no specific averaging time is provided." *Id.* To the contrary, Mr. Haber provides an averaging time of 3 hours – eight times shorter (and hence more stringent) than the averaging time in NDEP's final permit for Newmont. Pet. Ex. D, Ex. 4, p. 3.

Exhibit D, Ex. 1, page 2-9 and shows that the nitrogen content is lower in PRB coal, which will be used for Newmont.

⁸ Mr. Haber's analysis was prepared in conjunction with a federal lawsuit, *United States v. Illinois Power Company and Dynegy Midwest Generation, Inc.*, 245 F.Supp.2d 951 (U.S. District Court for the Southern District of Illinois, February 19, 2003). This report was subsequently modified, but not with respect to the relevant NO_x BACT limit. See Matt Haber, Supplemental and Rebuttal Report, October 2002.

⁹ Matt Haber, Best Available Control Technologies for the Baldwin Generating Station, Baldwin, Illinois, Redacted, April 2002.

NDEP also claimed in response that although 0.02 lb/MMBtu may be "achievable," it "is far from a guarantee," again attempting to redefine BACT. Response to Comments, p. ACE-6. However, BACT is not a guaranteed emission limit. Instead, the Clean Air Act and regulations specify that BACT is an "achievable" emission limit. 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12). The NSR Manual confirms that it is an achievable emission limit, noting "lack of a vendor guarantee by itself does not present sufficient justification that a control option or an emissions limit is technically infeasible." NSR Manual, p. B.20.

NDEP also characterizes Mr. Haber's allowance for the 0.02 lb MMBtu limit to be adjusted as high as 0.04 lb/MMBtu if a lower limit was demonstrated to be unachievable as a "lack of confidence." NDEP's characterization is baseless, does not rebut the failure to apply BACT for NOx, and, in any event, does not explain why Mr. Haber's allowance for even a 0.04 lb/MMBtu limit, if a lower limit was demonstrated to be unachievable, is not appropriate for Newmont. Further, Mr. Haber clearly explained why he allowed an adjustment: "I would provide this flexibility because this is a retrofit, and therefore more difficult." Pet. Ex. D, Ex. 4, p. 52. Newmont is a *new* facility that can be engineered from the ground up to meet a more stringent NOx limit. See also, *Id.*, p. 50 ("since this is a retrofit, rather than a new powerplant, it may be difficult to achieve the lowest levels reached by new plants").

The record is clear. According to an e-mail in NDEP's Newmont permitting file, the "[Bureau of Air Pollution Control] discussed the Matt Haber BACT limit recommendations with EPA. EPA said that it is possible that limits higher than the Haber recommendation may be acceptable. However, the BACT analysis must adequately demonstrate that any proposed limits higher than Haber's are justifiable." Pet. Ex. L, DeBurle 6/18/04.¹⁰ Yet, the lower NOx BACT limits in the Haber Report were not mentioned in the Newmont Application or NDEP's review of the permit.

c. Texas SIP Evidence That BACT For NOx Is 0.03 lb/MMBtu

The Texas Commission concluded that a NOx emission limit of 0.03 lb/MMBtu was "technically feasible in the commission's analysis, based on the literature and discussion with SCR vendors. [Reliant Energy Incorporated] has awarded a contract for construction of SCRs on its four coal-fired boilers with an emission specification of 0.03 lb NOx/MMBtu, which supports the commission's view that the technology has the capacity to achieve this level." Pet. Ex. D, Ex. 5: TR 1/12/01,¹¹ p. 557. The Commission then established emission limits of 0.033 lb/MMBtu for the Dallas/Fort Worth nonattainment area and 0.040 lb/MMBtu for the Houston/Galveston nonattainment area, which are applicable to coal-fired boilers. Pet. Ex. D,

¹⁰ E-mail from M. DeBurle, Nevada Bureau of Air Pollution Control, to Glen King, Newmont, Re: Comments on NNEI BACT Analysis, June 18, 2004.

¹¹ Texas Register, v. 26, no. 2, January 12, 2001, p. 557.

Ex. 6: TR 10/12/01,¹² p. 8159. These limits have been incorporated into the Texas SIP and are equivalent to LAER. Therefore, they should have been included in the top-down BACT analysis. See NSR Manual, p. B.5 and Table B-1 ("Technologies required under lowest achievable emission rate (LAER) determinations are available for BACT purposes and must also be included as control alternatives and usually represent the top technology.")

NDEP's response sets forth two clear grounds for a remand. First, NDEP summarily claimed there is "no data to support this position," even though Petitioner provided support for its comment. Specifically, we included in our comments Texas rules establishing that a NOx emission limit of 0.08 lb/MMBtu is technically feasible. Second, NDEP claimed that neither Nevada's SIP nor Administrative Code incorporated the Texas SIP's requirements. However, there is no requirement that a limit be incorporated in a SIP or state regulations to qualify as BACT. NDEP's failure to respond to Petitioner's comment and failure to conduct a BACT analysis in light of the evidence constitutes clear error.

d. Georgia Letter and Babcock & Wilcox Paper Evidence That BACT For NOx Is 0.016 lb/MMBtu For Eastern Bituminous Coal And 0.008 lb/MMBtu For Western PRB Coal

Petitioner presented evidence that a NOx emission rate of 0.016 lb/MMBtu can be achieved for eastern bituminous coal and a NOx emission rate of 0.008 lb/MMBtu can be achieved for low-sulfur, western PRB coal.

¹² Texas Register, v. 26, no. 41, October 12, 2001, p. 8159-8163.

Specifically, the Georgia Department of Natural Resources wrote to the Longleaf Energy Station applicant for a pulverized coal-fired power plant that its limited consideration of BACT control technologies and corresponding BACT emission limits in the RACT/BACT/LAER Clearinghouse (RBLC) "is not acceptable." The agency also wrote:

In addition, Babcock & Wilcox presented a paper titled "How Low Can We Go" at the 2001 Mega Symposium. This paper [] reports that there are emission control technologies for *eastern bituminous coal* that can achieve 0.016 lb/MMBtu NO_x, 0.04 lb/MMBtu SO₂, and 0.006 lb/MMBtu PM-10.... Keeping in mind that the Permitting Authority must consider all information submitted through the comment period on the draft permit in assessing BACT, at the present time EPD is considering these levels as BACT. These levels must be included in your analysis.

Pet. Ex. D, Ex. 7 (emphasis added).¹³

The Babcock & Wilcox paper cited in this letter reports that, for *low-sulfur, western PRB coal*, the type of coal proposed for Newmont, a NO_x emission rate of 0.008 lb/MMBtu is achievable. Pet. Ex. D, Ex. 8,¹⁴ p. 1 (emphasis added). This rate can be achieved using low NO_x burners, which reduce boiler outlet NO_x to 0.16 lb/MMBtu, and an SCR designed to achieve 95% NO_x removal. Pet. Ex. D, Ex. 8, Table 2. In sum, Petitioner commented that NDEP should have considered this NO_x level in its BACT analysis for Newmont.

¹³ Letter from James A. Capp, Manager, NO_x Permitting Unit, Georgia Department of Natural Resources, Environmental Protection Division, to D. Blake Wheatley, Longleaf Energy Associates, March 6, 2002.

¹⁴ G.T. Bielawski, J.B. Rogan, and D.K. McDonalds, *How Low Can We Go? Controlling Emissions in New Coal-Fired Power Plants*, The Mega Symposium, August 2001.

The NDEP's response is conclusory and thus warrants a remand. See In re Pennsauken County, 2 E.A.D. 667, 672, (EAB 1988) (EAB remands permit because "applicant's assertions that the technology has not yet been demonstrated to be efficient, reliable, and cost effective in controlling NOx are merely conclusory.").

NDEP responds that they have had "contacts" with Babcock and Wilcox engineering staff indicating that they have not built such a unit and that they have not provided any guarantees. Response to Comments, ACE-6-7. NDEP's response is inadequate for three reasons.

First, whether the facility has been built is irrelevant to a BACT determination. A BACT emission limit need only be "achievable," which does not require that the facility has already been built. If already built were a requirement, the technology forcing aspect of BACT would be eliminated.

Second, Babcock & Wilcox have indeed proposed such a facility called the Thoroughbred Ultra Low Emissions Project, or TULEP. Pet. Ex. K. TULEP proposed to meet the NOx emission limits described in the Babcock & Wilcox paper even though TULEP was based on a bigger boiler and dirtier eastern bituminous coal. Id.

Third, NDEP's response constitutes clear error, because NDEP again attempts to redefine BACT in a manner inconsistent with the Clean Air Act and regulations. BACT is not a *guaranteed* emission limit. Instead, the Clean Air Act and regulations specify that BACT means "[a]n emission

limitation...based on the maximum degree of reduction...which the permitting authority, on a case-by-case basis...determines is achievable for such facility..." 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12).

e. Foreign Operating Experience Evidence That BACT For NOx Is Less Than 0.05 lb/MMBtu

Petitioner commented that several foreign units are operating at lower NOx levels than in NDEP's final permit for Newmont. Petitioner presented evidence that the 250 MW Amager Power Station in Denmark is achieving NOx levels of less than 0.04 lb/MMBtu. This plant started up in October 2000 and operates on low sulfur coal similar to sub-bituminous coal. Operating and emissions data are summarized in Exhibit 9 of Petitioner's comments on the draft permit. Pet. Ex. D, Ex. 9.¹⁵

Petitioner also presented evidence regarding lower NOx emission rates in Japan. An SCR unit on a 1000-MW PC boiler in Japan has achieved a NOx emission rate of 0.05 lb/MMBtu with an ammonia slip of less than 1 ppm. Pet. Ex. D, Ex. 10: Nakatani.¹⁶ A 250-MW boiler has achieved a NOx emission rate of 0.04 lb/MMBtu, based on 80% NOx control. Pet. Ex. D, Ex. 11: Pritchard et al. 1995.¹⁷

With respect to the Denmark NOx limit, NDEP responded that the operating and emissions data submitted by Petitioner do not provide a clear

¹⁵ Topsoe DENOX Catalysts, DNX-Series, Industrial Experience, Amager Power Station Unit 3.

¹⁶ H. K. Nakatani, Latest SCR Technologies and Experience on Coal Fired Boilers.

¹⁷ S. Pritchard and others, Optimizing SCR Catalyst Design and Performance for Coal-Fired Boilers, EPA/EPRI 1995 Joint Symposium, Stationary Combustion NOx Control, May 1995.

indication of compliance tests or time periods – even though the data provides more detail than what NDEP provided to support its NOx limit in the final permit for Newmont. In fact, NDEP did not and could not point to any data to support the 0.067 lb/MMBtu NOx limit as BACT for Newmont. In contrast, Petitioner's evidence includes a summary of 2½ years of operating data on a similar plant of a similar size and using similar coal, and it provides *actual* NOx emission data. This is exactly the kind of data that ordinarily would be relied on in making a BACT determination.

With respect to the NOx limits in Japan, NDEP concedes that the SCR system achieved an outlet NOx rate of 0.05 lb/MMBtu. However, NDEP then claims that the rate was only achieved as part of a tuning exercise. NDEP's response is incorrect. To the contrary, the 0.05 lb/MMBtu NOx rate was achieved as part of the overall performance. Pet. Ex. D, Ex. 10, pp. 5, 8. It has clearly been confirmed that the 0.05 lb/MMBtu NOx limit has been satisfied. Pet. Ex. D, Ex. 10, pp. 8.

Finally, NDEP simply failed to respond to Petitioner's comment that a 250-MW boiler has achieved a NOx emission rate of 0.04 lb/MMBtu, based on 80% NOx control. Pet. Ex. D, p. 10, citing Ex. 11: Pritchard et al. 1995.¹⁸ NDEP's failure to respond is clear basis for remand.

¹⁸ S. Pritchard and others, Optimizing SCR Catalyst Design and Performance for Coal-Fired Boilers, EPA/EPRI 1995 Joint Symposium, Stationary Combustion NOx Control, May 1995.

f. USEPA Region 3 Evidence That BACT For NO_x Is 0.04 lb/MMBtu

Petitioner commented that the USEPA, Region 3, filed comments on the Longview Power Plant explaining that BACT for NO_x is 0.04 lb/MMBtu based on a 24-hour average. Pet. Ex. D, Ex. 12: Campbell 9/29/03.¹⁹ The USEPA cited CEMS data for the Montour Power Station in Pennsylvania where the lower NO_x limit was achieved. The Pennsylvania Department of Environmental Protection ("PA DEP") subsequently wrote that "PA DEP concurs with EPA's assessment that an appropriate BACT level for a pulverized coal-fired boiler controlled by an SCR system should be 0.04 lb of NO_x/MMBtu on a 24-hour basis, instead of the 0.08 lbs/MMBtu emission rate that has been proposed for the Longview Power Plant." Pet. Ex. D, Ex. 13: DiPasquale 12/31/03.²⁰

NDEP responded that Pennsylvania is operating "under a presumption that a stack test provides a sound guarantee of continued operation for a facility." Pet. Ex. I, Responses to ACE Comments, p. ACE-7. NDEP also responded that "[i]t is impossible to draft a permit based on a single set of tests and expect that the performance would be achieved continually on a long term basis." Id. NDEP's response is facially incorrect.

¹⁹ Letter from David J. Campbell, Chief, Permits and Technical Assessment Branch, U.S. EPA, Region 3, to Edward Andrews, West Virginia Department of Environmental Protection, Re: Longview Power LLC Draft PSD Air Permit, Transmitted by e-mail dated September 29, 2003.

²⁰ Letter from Nicholas A. diPasquale, Deputy Secretary for Air, Recycling and Radiation Protection, to John Benedict, Director, West Virginia Division of Air Quality, Re: Longview Power, LLC, December 31, 2003, Faxed January 2, 2004.

Although a stack test is commonly used to establish BACT, Petitioner submitted evidence that Pennsylvania relied on Continuous Emission Monitoring System (CEMS) data, not a stack test. Pet. Ex. D, Ex. 13. CEMS data is collected and reported every 15 minutes, continuously. Moreover, after reviewing the CEMS data, Pennsylvania noted that “the NO_x control levels at the Montour plant clearly show that SCR systems...were consistently able to achieve a NO_x emissions level of less than 0.04 lb/MMBtu on a 24-hour average.” Pet. Ex. D, Ex. 13, p. 2. Thus, NDEP’s response is patently incorrect and the permit should be remanded to NDEP to conduct an adequate BACT analysis.

3. Higher NO_x Control Efficiencies Are Achievable

Petitioner commented that BACT for NO_x should be based on a control efficiency greater 90 percent, rather than on 66.5 percent relied upon by NDEP. Pet. Ex. J; Ap., Appx. 10B (BACT Cost Data, p. 1 of 10). The higher control efficiency should be evaluated, because BACT is an emission limit based on “the maximum degree of reduction” that is “achievable.” 40 CFR 52.21(b)(12). In response, NDEP claimed that the permit does not need to include a percent reduction, BACT is based on performance of the proposed control technology, and higher control efficiencies may not be achieved. NDEP’s response to Petitioner’s comment is inadequate for three reasons.

First, NDEP is non-responsive. NDEP argues that a PSD permit does not need to include a percent reduction, only an emission limit. However,

Petitioner did not comment that the PSD permit must include a percent reduction. Instead, Petitioner commented that BACT must be *based on* the maximum degree of reduction.

Second, NDEP's response redefines BACT inconsistent with the plain language of the statute and regulations. NDEP states that "[t]he NO_x limit is based on performance of the SCR system on a proposed boiler." Response to Comments, p. ACE-3. However, BACT is an emission limit based on the "maximum degree of reduction" that is "achievable." 40 C.F.R. § 52.21(b)(12). In this case, NDEP's BACT analysis selects an emission limit without considering the most effective performance level, or maximum degree of reduction. Yet, the control methods that were selected have a wide range of emission performance levels, e.g., SCR can remove from as little as 30% to over 90% of the NO_x.

Third, in its response, NDEP provides no support for its opinions regarding control efficiencies. NDEP merely states that "[e]ngineering data show that the percent reductions achieved at high 'feed rate' to the SCR may not be achieved with relatively lower feed rates from the proposed boiler, even though overall NO_x emissions will be less at the lower feed rate." Pet. Ex. I, Responses to ACE Comments, p. ACE-3. Not only does NDEP provide no support for this statement, but substantial evidence shows that this is incorrect.

NDEP's response is incorrect, because it claims that NOx control efficiency depends on feed rate. However, feed rate is a design parameter that determines the size and cost of the SCR, not its control efficiency. The inlet concentration, expressed in ppm or lb/MMBtu, does not affect removal efficiency.

In response to NDEP's claims as to SCR performance, we compiled NOx removal efficiencies and inlet NOx levels. These are shown in Petitioner's Exhibit Q, which shows that NOx removal efficiency is independent of inlet NOx. The reason removal efficiency is independent of inlet SCR NOx level is explained in the attached Babcock & Wilcox design paper: "Low inlet NOx concentrations can require increased catalyst volume to account for the negative kinetics. However, Figure 17 shows how increase inlet NOx concentrations increase the need to provide a good inlet NH3/NOx blend uniformity." Pet. Ex. Q, pp. 6-7. Figure 17 shows that 90 percent NOx control can be achieved for inlet NOx levels ranging from 100 ppm to 500 ppm, the range for typical PRB low NOx burner controlled plants. Id.

This was also supported by the record before NDEP. The Babcock & Wilcox paper, entitled "How Low Can You Go?", reports that a 95 percent NOx control efficiency is achievable for an inlet NOx of 0.31 lb/MMBtu and 0.16 lb/MMBtu for the same size pulverized coal-fired plant. Pet. Ex. D, Ex. 8, Table 2. The Haber Report assumed that 90 percent NOx control efficiency is achievable for inlet NOx levels of 0.3 to 0.7 lb/MMBtu. Pet. Ex. D, Ex. 4,

pp. 48, 50. In fact, Mr. Haber assumes 90 percent NOx control efficiency for nearly identical coal proposed for Newmont, thus demonstrating that for this specific case, there is no constraint associated with low NOx inlet rates.

Even if NDEP were correct that the inlet concentration affects removal efficiency, then Newmont could meet a higher total NOx control level (and hence lower NOx emission limit) by not using low NOx burners, or by using less efficient low NOx burners (increasing the NOx feed rate to the SCR) and a more efficient SCR system. The NOx control range for low NOx burners is 15 to 50 percent and for SCR, it is 60 to 95 percent. See Pet. Ex. D, Ex. 4, pp.36, 41, 43, 49; Pet. Ex. D, Ex. 8, pp. 3, 6. Thus, the SCR is the major NOx control device.

A lower NOx emission limit could be achieved, for example, under NDEP's theory, if low NOx burners were not used. The applicant proposed low NOx burners capable of meeting 0.2 lb/MMBtu and an SCR achieving 66.5% NOx control. Pet. Ex. J, Ap., Appx. 10B, BACT Cost Data, p. 1 of 10. If NDEP were correct, the achievable NOx emission rate would be 0.04 lb/MMBtu if a 90 percent efficient SCR were used with no low NOx burners, assuming the burners achieve 50 percent NOx control. Further, we note that the proposed SCR NOx inlet level of 0.2 lb/MMBtu is much higher than the

level that can be achieved with low NOx burners. Pet. Ex. D, pp. 15-16, Ex. 16,²¹ Ex. 1, p.4-5.

Thus, if NDEP is correct that low inlet NOx from Newmont's PRB coal (the same as assumed by Haber and Babcock & Wilcox) limits the NOx control efficiency achievable by SCR, then the choice of high efficiency low-NOx burners (from about 0.4 lb/MMBtu for an uncontrolled PRB coal to the proposed 0.2 lb/MMBtu) artificially constrained the total NOx efficiency by limiting what could be achieved by the SCR alone. This is precisely the type of tradeoff that should be evaluated in a BACT analysis. Thus, even if NDEP is correct that the inlet concentration affects removal efficiency, the use of a 66.5 percent efficient SCR is clear error.

Petitioners presented substantial evidence that an SCR control efficiency higher than 66.5 percent is achievable for Newmont. SCR systems, regardless of coal, are routinely designed and guaranteed to achieve much higher NOx control efficiencies than relied upon in the permit. For example, a NOx reduction greater than 90 percent has been achieved on similar low-sulfur coals. The Amager Power Station, in Denmark, for example, is guaranteed to achieve 94 percent NOx reduction and fires coal with 0.6 percent to 0.7 percent sulfur. The NOx reduction has ranged from 90 percent to 95 percent. Pet. Ex. D, Ex. 9; see also Pet. Ex. D, Ex. 1, Desert Rock

²¹ G.H. Richards, Alstom, Development of an Ultra-Low NOx Integrated System for Pulverized Coal Fired Power Plants, May 16, 2002, <http://www.netl.doe.gov/publications/proceedings/02/scr-sncr/richardssummary.pdf>.

Application, p. 2-9 (confirming 90 percent NOx control is achievable); Pet. Ex. D, Ex. 4, Haber Report (confirming 90 percent NOx control is achievable). Therefore, 90% reduction is achievable. Assuming an SCR inlet NOx level of 0.15 lb/MMBtu, which is typical for Powder River Basin coals using low NOx burners,²² the corresponding SCR NOx outlet would be 0.015 lb/MMBtu.

Petitioner also directed NDEP to evidence in the record from Alstom Power stating that 80 to 85 percent NOx reduction efficiencies can be maintained over the service life of the catalyst. Pet. Ex. M (Alstom 2/23/2004). Thus, the BACT analysis should have evaluated 90 percent control for a boiler outlet NOx of 0.15 lb/MMBtu (achieved with ultra low-NOx burners), i.e., a NOx limit of 0.015 lb/MMBtu.

B. The PM/PM10 Limit Is Not BACT

The *draft* permit proposed BACT for PM10 emissions from the PC boiler as an emission limit of 0.038 lb/MMBtu based on a 24-hour rolling average, achieved using fabric filters. Pet. Ex. J, Ap., p. 10-20; Pet. Ex. 3, Review, p. 12; Pet. Ex. C, Draft Permit, Sec. V.A.2.a(4), p. V-1. This limit was characterized as total PM10, comprising the sum of filterable PM10 plus condensable PM10, in both the draft permit and the applicant's top-down BACT analysis. Pet. Ex. C, Draft Permit, Sec. V.A.4.a(1) and (2), p. V-4.

²² Newmont's project description notes that "[t]he boiler will be designed to burn low-sulfur Powder River Basin (PRB) coal and to operate efficiently under a range of coal quality parameters that are typical of PRB coals." Newmont, TS Power Plant Nevada State Clearinghouse Project Description Submittal, June 7, 2004.

Petitioner commented that lower total PM10 limits are achievable, based on permits and stack tests, and thus BACT for total PM10 is much lower. The NDEP did not respond directly to this issue, but instead *removed* the total PM10 BACT limit from the permit, without disclosing in its responses that it had removed the total PM10 BACT limit and with no explanation whatsoever.

Petitioner also commented that the PM10 averaging time is not BACT, lower total and filterable PM10 limits are achievable, and the PM10 BACT limit is not enforceable. For each of these comments, NDEP either did not respond or its responses contain a number of errors and omissions or are conclusory and unsupported.

1. The Total PM10 Limit Was Removed From The Permit

The draft permit set a BACT limit on total PM10, comprising the sum of filterable plus condensable PM10, of 0.038 lb/MMBtu. Pet. Ex. 3, Draft Permit, Section V.A.2.a.(4), p. V-1. This limit was based on the applicant's top-down BACT analysis, which concluded that BACT for total PM10 is 0.038 lb/MMBtu. Pet. Ex. 10, Ap., Appx. 10, p. 10-20.

In Petitioner's comments on the draft permit, we provided substantial evidence that BACT for total PM10 is much lower than 0.038 lb/MMBtu. Pet. Ex. D, pp. 35-41. Rather than responding to Petitioner's evidence, NDEP sidesteps the comment by replacing the *total* PM10 limit of 0.038 lb/MMBtu with a *filterable* PM10 limit of 0.012 lb/MMBtu. NDEP does not disclose in

the responses that it has removed the total PM10 BACT limit from the permit. Instead, NDEP's removal of the total PM10 limit must be ferreted out by comparing the draft and final permit line by line. Moreover, the replacement filterable PM10 limit comes out of thin air, with no support, explanation or analysis whatsoever and is not BACT.

The replacement of a total PM10 BACT limit with an unsupported filterable limit without putting Petitioner on notice and responding to our comments on total PM10, the regulated pollutant, is clear error and warrants remand.

a. The Regulated Pollutant Is Total PM10

The final permit does not contain a BACT emission rate limit on total particulate matter, the regulated pollutant.²³ NDEP's response to the National Park Service's comments claims that restricting BACT to only the filterable portion is warranted because it is consistent with comparable facilities and only Nevada law requires total PM10. Pet. Ex. H, p NPS-21-22. NDEP's response is incorrect.

²³ The BACT limit for PM/PM10 is identified as "BACT Emission Limit" in Section V.A.2.a(4) of the final permit. Pet. Ex. A, p. V-1. The final permit also contains a mass emission limit of 77.1 lb/hr for filterable plus condensable PM10 in Condition V.A.2 a(1). *Id.* This emission rate is equivalent to 0.038 lb/MMBtu (77.1/2030). However, this limit is not characterized in the final permit as a BACT limit and thus is not subject to the top-down BACT process that, if properly implemented, would result in a much lower total PM10 limit than originally proposed in the draft permit.

Particulate matter ("PM") consists of two fractions -- condensibles and filterables.²⁴ The EPA explained in the preamble in which it adopted the PSD significance threshold for PM10 that: "[p]articulate matter" is the generic term for a broad class of chemically and physically diverse substances that exist as discrete particles (liquid droplets or solids).... They may be emitted directly or formed in the atmosphere by transformations of gaseous emissions such as sulfur oxides, nitrogen oxides and volatile organic substances." 52 Fed. Reg. 24635 (July 1, 1987). The "liquid material" and material that forms in the atmosphere are condensible particulate matter. See 55 Fed. Reg. 14246 (April 17, 1990).

The USEPA considers condensible particulate matter ("CPM") to be included in PM10. The preamble promulgating test methods to measure PM10, Methods 201 and 201A states: "the EPA recognizes that condensible emissions are also PM10, and that emissions that contribute to ambient PM10 concentrations are the sum of in-stack PM10, as measured by Method 201 or 201A, and condensable emissions." 55 Fed. Reg. 14246 (April 17, 1990). In the preamble both proposing and promulgating a method to measure condensible PM10, the agency affirmed: "[s]ince CPM [condensable particulate matter] emissions form very fine particles in the PM10 size range and are considered PM10 emissions, the Agency is adding a method for measuring CPM emissions from stationary sources to appendix M in 40 CFR

²⁴ The filterable fraction is the material that is collected on a filter paper during a Method 201 or 201A test and is primarily ash originally present in the coal. The condensible fraction is gases that condense during a Method 202 test. See 56 FR 65,433 (Dec. 17, 1991).

part 51." 55 Fed. Reg. 41546 (October 12, 1990); 56 Fed. Reg. 65433 (December 17, 1991).

The EPA has defined "primary PM" in criteria documents that establish the basis for the PM₁₀ NAAQS as particles that are either emitted directly as a solid or liquid or are emitted as a vapor but condense or react upon cooling and dilution in the ambient air to form solid or liquid PM immediately after discharge from the stack.²⁵ The EPA has consistently implemented this definition by requiring that condensible PM₁₀ be included in the emission inventories required to meet State Implementation Plan ("SIP") requirements for complying with the PM₁₀ and PM_{2.5} NAAQS.²⁶ In 1994 guidance, EPA advised the States: "[c]ondensible particulate matter is of potential importance because it usually is quite fine and thus falls primarily within the PM-10 fraction. As a consequence, condensible particulate matter should always be included in the emission inventory." *Id.*, Sec. 2.1.2.

Finally, in written guidance to Iowa, USEPA, in response to the question, "Does the Environmental Protection Agency (EPA) definition for PM-10 include condensible particulate matter (CPMP)" stated: "Yes, the definition of PM-10 includes CPM. CPM is of potential importance to attainment of the PM-10 national ambient air quality standards because it

²⁵ EPA, Air Quality Criteria for Particulate Matter, Report EPA-600/P-95/001, April 1996.

²⁶ EPA, PM-10 Emission Inventory Requirements, Final Report, September 1994.

usually is quite fine and thus falls primarily within the PM-10 fraction."²⁷ Thus, the regulated pollutant for purposes of a BACT determination is total PM10, comprising the sum of filterable and condensable PM10. The final permit does not contain a BACT emission rate limit for total PM10 and thus should be remanded for a total PM10 BACT determination.

b. The Filterable PM10 Limit Is Not BACT

The final permit sets a BACT emission limit on filterable PM10 of 0.012 lb/MMBtu. Pet. Ex. 1, Final Permit, Condition V.A.2.a(4). This limit appears out of thin air, with no support whatsoever. It is simply asserted to be BACT in NDEP's response to National Park Service Comments. Pet. Ex. H, p. NPS-22. The files contain no top-down BACT analysis supporting this limit.

Petitioner pointed to substantial evidence that a filterable PM10 limit much lower than 0.012 lb/MMBtu has been achieved, including 225 stack tests on similar coal-fired boilers. Pet. Ex. 4, Comment I.C.4.g, pp. 40-41. NDEP's only response to this voluminous evidence is facially ridiculous. Pet. Ex. I, Responses to ACE Comments, p. ACE-26.

NDEP first asserts that "[i]t is not certain how these test results compare to the permit limit." *Id.* However, BACT is not a permit limit. The search to identify BACT, the emission limit corresponding to the maximum degree of reduction, is wide ranging and covers much broader territory than

²⁷ Letter from Thompson G. Pace, Acting Chief, SO₂/Particulate Matter Programs Branch, EPA Region VII, to Sean Fitzsimmons, Iowa Department of Natural Resources, March 31, 1994.

just permit limits. NSR Manual, p. 11. Stack tests are usually sufficient justification to assume the feasibility of a limit. NSR Manual, p. B.5-B.7.

Second, NDEP asserts, in the face of two hundred twenty-five source tests, far more than is typically available to an agency, that "it is not clear that the emission limit would be consistently achievable for a rolling 24-hour average." Pet. Ex. I, Responses to ACE Comments, p. ACE-26. The NDEP does not explain why 225 stack tests is not adequate, when NDEP relies on a single stack test using identical methods over the entire life of the facility to determine compliance with the PM10 limit.

Thus, setting aside the fact that filterable PM10 is only part of the regulated pollutant, the proposed filterable PM10 limit of 0.012 lb/MMBtu is not BACT. The Board should remand the permit to NDEP to make a BACT determination for total PM10 and to require BACT.

2. NDEP Failed To Determine BACT For Condensible Particulate Matter Emissions

As discussed above, PM consists of two fractions -- condensibles and filterables. The *draft* permit proposed a BACT emission limit on total PM10 of 0.038 lb/MMBtu, comprising 0.015 lb/MMBtu filterable and 0.023 lb/MMBtu condensable. Pet. Ex. J, Ap., Appx 10, p. 10-20. The *final* permit eliminated the BACT total PM10 limit, but does not state that the total PM10 limit was deleted in its response to Petitioner's comment. The final permit contains no BACT emission rate limit, implied or otherwise, on the condensable fraction of PM10. Moreover, NDEP does not address our original

comment that the draft permit's implied condensable limit is much higher than the sum of its parts, demonstrating that it is unreasonable.

We commented that the draft permit's BACT total PM10 limit was much higher than the sum of its parts and thus, BACT was not determined properly for condensibles. The condensible PM10 primarily consists of hydrogen chloride (HCl), hydrogen fluoride (HF), sulfuric acid mist (SAM), volatile organic compounds (VOCs), and ammonia. The permit contains limits on these components. The sum of these component limits is 0.0167 lb/MMBtu. The condensable fraction implied by the draft total PM10 limit is 0.023 lb/MMBtu, which is 38 percent higher than the sum of its parts.

NDEP makes a number of nonresponsive replies to our comment that the implied condensable limit is not equal to the sum of its parts, none of which address the issue we raised, namely that on its face, the total PM10 limit was higher than justified based on the record.

First, NDEP notes that it lowered the filterable fraction of PM10 from 0.015 to 0.012 lb/MMBtu. This is not responsive because our comment addressed condensable PM10, not filterable PM10.

Second, NDEP claimed that "[f]or PSD purposes BACT is typically set for the filterable portion of the sample only." Response to Comments, ACE-23. NDEP points to no evidence for this claim. Moreover, NDEP's claim is contrary to the preamble in the USEPA's rulemaking which adopted the PSD PM10 significance threshold. 52 Fed. Reg. 24635 (July 1, 1987). The USEPA

clearly indicates that condensable PM10 is actionable for purposes of BACT because the threshold triggering the analysis is total PM10. Id.

Third, in responding to Petitioner's comment that the condensable limit of 0.023 lb/MMBtu implied by the draft total PM10 limit of 0.038 lb/MMBtu is 38 percent higher than the sum of its parts, NDEP argued that "[l]imits on condensables were made with a focus on air quality impacts." Pet. Ex. I, Responses to ACE Comments, ACE-23. However, meeting ambient air quality standards is a separate issue from determining BACT under the PSD program. Under the PSD program, a facility must use BACT for all pollutants that exceed the Clean Air Act's significance thresholds. 40 C.F.R. § 52.21(j)(2); see also 40 C.F.R. § 52.21(b)(23) (significance thresholds).

In this case, since emissions exceed the significance thresholds for PM10, and the significance threshold is expressed as total PM10, BACT is required for total PM10, which includes condensable PM10. NDEP has clearly not required BACT since the condensable fraction is much larger than the permit limits on the sum of its parts. Further, assuming the draft permit's BACT total PM10 limit was set to protect ambient air quality, the NSR Manual indicates that "BACT emission limits must...demonstrate protection of short-term ambient standards (limits written in pounds/hour)..." NSR Manual, p. B.56. The final permit does not contain a responsive total PM10 limit.

Here, NDEP has simply failed to consider condensable PM10, a fraction of total PM10, in its top-down BACT analysis. Incomplete BACT analyses are grounds for remand. See In re Masonite Corp., 5 E.A.D. 551, 568-69, 572 (EAB 1994) (remand of PSD permit due to incomplete analyses in BACT determination); In re Brooklyn Navy Yard Resource Recovery Facility, 3 E.A.D. 867, 875 (Adm'r 1992) (PSD permit remanded for failure to adequately consider viability of measures suggested by Petitioners for reduction of NOx emissions.)

Therefore, Petitioners request that the Permit be remanded to NDEP to perform a proper BACT analysis that explicitly addresses the condensable fraction of PM10 and circulate the resulting analysis for public review.

3. Lower PM10 Limits Are Achievable

Petitioner commented that lower PM10 BACT limits are achievable and that NDEP failed to provide any support for the draft permit's proposed total PM10 limit of 0.038 lb/MMBtu. Pet. Ex. D, p. 23. NDEP failed to respond to Petitioner's comment. Instead it cited its "confusion" regarding limits in the RBLC database for PM10. This is irrelevant to performing an adequate BACT analysis. Pet. Ex. I, Responses to ACE Comments, p. ACE-22.

First, the NDEP did not raise the "confusion" issue in responses to the National Park Service, and in fact, relies on the RBLC to support its decision to limit only filterable PM10: "[s]ince most boilers on the RBLC database

have BACT levels selected based on the filterable fraction only, BAPC is revising the Draft Permit to set the PM and PM10 BACT emission levels at 0.015 lb/MMBtu..." Pet. Ex. H, Response to NSPS Comments, p. NPS-21.

Second, the RBLC is only one of many sources an applicant should consider to determine BACT. NSR Manual, p. B.11. Further, one can contact the permitting agency to resolve any discrepancy in the RBLC, or, alternatively, find the permit on line and resolve any uncertainty. NDEP did not do either. Instead, NDEP merely complained that it could not figure out whether the PM10 limits in the RBLC are total or filterable only.

NDEP concludes its response by stating, again with no support, that "[t]he BACT analysis determined an emission limit for PM10, which has now been set at 0.012 lb/MMBtu." Id. However, 0.012 lb/MMBtu is only filterable PM10, a component of the regulated pollutant. This does not address our comment that the total PM10 limit is unsupported and does not represent BACT. Thus, NDEP again has failed to provide any basis for its BACT determination.

Petitioner then identified specific evidence that BACT for total PM10 is less than the proposed 0.038 lb/MMBtu. We commented that Newmont should be able to meet the same or a lower total PM10 limit as Northampton Generating Company in Pennsylvania. In April 1995, Pennsylvania issued a permit setting a total PM10 limit of 0.0088 lb/MMBtu based on an hourly

average. Pet. Ex. D, Ex. 12. This facility burns anthracite culm²⁸ in a 1,146 MMBtu/hr circulating fluidized bed boiler.

Petitioner commented that Newmont should be able to meet the same or a lower PM₁₀ limit, because the major source of filterable particulate matter – the ash content of Newmont’s coal – is only 5.75% or nearly seven times lower than the ash in Northampton’s fuel. Pet. Ex. D, p. 37 citing Ap., p. 5-8; see also Pet. Ex. J, Ap. 5, p. 5-8. Similarly, Newmont should be able to meet the same or a lower *total* PM₁₀ limit, because the major source of condensable particulate matter – sulfur in Newmont’s coal – has a lower SO₂ inlet loading (1.16 lb SO₂/MMBtu) than Northampton (1.87 lb SO₂/MMBtu). Pet. Ex. D, p. 37 citing Ap., p. 5-8; see also Pet. Ex. J, Ap. 5, p. 5-8. Therefore, presumptive BACT for total PM₁₀ for Newmont is an emission limit of 0.0088 lb/MMBtu.

NDEP failed to provide a response prior to issuing the final permit. NDEP suggested that Northampton is not applicable to Newmont, but that “[t]he performance of the Northampton facility in meeting its stated emission limits is being investigated and is not resolved.” Pet. Ex. I, Responses to ACE Comments, p. ACE-24. The EPA, however, commented that the Northampton permit limit was applicable to the PM/PM₁₀ BACT determination for a similar pulverized coal-fired boiler and that Northampton

²⁸ Culm is an anthracite waste product.

was meeting this limit, based on stack tests. Pet. Ex. D, Ex. 12: Campbell 9/29/03.²⁹

The NDEP's failure to resolve the issue and respond to the comment before issuing the final permit is grounds for a remand. See In re Prairie State Generation Station, PSD Appeal No. 05-02 (EAB, March 25, 2005); In re Amerada Hess Corp. Port Reading Refinery, PSD Appeal No. 04-03 (EAB, Feb. 1, 2005).

4. The PM10 Averaging Time Is Not BACT

Petitioner commented that the draft permit's PM10 limit based on a 24-hour rolling average must be either justified or replaced by a 3-hour average in order to satisfy BACT. Pet. Ex. 8, Responses to ACE Comments, p. ACE-21. The basis for Petitioner's comment was that 1) longer averaging times are not as stringent as shorter averaging times, and 2) the 24-hour rolling average is undefined because the draft permit only requires two stack tests over the entire life of the facility.

NDEP did not respond to Petitioner's comment that the PM10 averaging time is not BACT because the 24 hour averaging time is not as stringent as a 3 hour averaging time. NDEP's failure to respond to this comment is a clear basis for remand.

²⁹ Letter from David J. Campbell, Chief, Permits and Technical Assessment Branch, U.S. EPA, Region 3, to Edward Andrews, West Virginia Department of Environmental Protection, Re: Longview Power LLC Draft PSD Air Permit, Transmitted by e-mail dated September 29, 2003.

In response to Petitioner's comment that the 24-hour rolling average is undefined because the draft permit only requires two stack tests over the entire life of the facility, NDEP argued that the facility will be required to conduct monitoring and perform additional stack tests, but that such monitoring and stack tests will not be included in the final permit. Instead, the facility will submit "a plan" for Compliance Assurance Monitoring stipulations, and "periodic source tests will be required in the subsequent Title V operating permit." Pet. Ex. 8: Responses to ACE Comments, p. ACE-21. NDEP's failure to require adequate monitoring and compliance conditions in the final permit is clear legal error. The final permit's failure to ensure enforceability is addressed as a separate ground for remand in Section II below.

In sum, NDEP did not respond to Petitioner's comment that the PM10 averaging time is not BACT because the 24 hour averaging time is not as stringent as a 3 hour averaging time. NDEP's failure to respond to this comment is a clear basis for remand.

C. The Final Permit and the BACT Analysis Do Not Require BACT For Fugitive Dust Emissions

Petitioner commented that NDEP must require BACT limits for fugitive dust emissions. Pet. Ex. D, p. 46. NDEP disagreed. Pet. Ex. I, Responses to ACE Comments, p. ACE 29-30. NDEP responded that "it is extremely burdensome to attempt to set percent controls based on these estimates, and to incorporate them into a permit." Pet. Ex. I, Responses to

ACE Comments, p. ACE-29-30. NDEP argued that since it conducted an ambient air quality assessment based on emission estimates, no BACT limit is required. This is clear legal error.

The PSD program applies to fugitive sources, the potential to emit must include fugitive emissions, and BACT must be specified for fugitive sources. (40 C.F.R. § 52.21; NSR Manual, pp. A.10, A.11, A.29, A.30.) Fugitive emissions are those "...which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." (40 C.F.R. § 52.21(b)(20).) Sources of fugitive emissions include wind erosion of storage piles, emissions from hauling, dumping, and pushing material, and dust from paved and unpaved roads.

NDEP's and Newmont's emission calculations estimated PM/PM10 emissions for fugitive sources, assuming specific control methods and control efficiencies. Ex. J, Ap., Appx 5. Petitioner commented that the assumptions, at a minimum, should be specified as limits in the permit, and compliance monitoring should be required. See NSR Manual, pp. I.1-3. According to the NSR Manual, "if a source has been determined to be major, fugitive emissions, to the extent they are quantifiable, are considered in any subsequent analysis..." NSR Manual, p. A.10. Thus, the following, based on emission calculations, should be set as permit limits:

- 85 percent for rail car unloading coal piles based on water spray and compaction (Id., p. 5-5);

- 50 percent for rail car coal pile enclosure (Id.);
- 90 percent for the inactive coal storage pile based on water sprays with binder (Id., p. 5-6);
- 75 percent for the active coal storage pile for front-end loader operations based on water sprays (Id.);
- 87.5 percent for coal pile stackout based on water sprays and lowering well enclosure (Id., p. 5-5);
- 87.5 percent for the coal reclaim hopper based on water sprays plus enclosure (Id., p. 5-7);
- 75 percent for paved and unpaved roadway emissions based on water sprays (Id., pp. 5-13, 5-14);
- 75 percent for active fly ash landfill based on water sprays (Id., p. 5-12);
- 90 percent for front-end loader operations at the fly ash landfill based on water spraying (Id., p. 5-13);
- 75 percent for truck unloading at the fly ash landfill based on water spraying (Id., p. 5-12); and
- 85 percent for bottom ash stackout based on wet material via a water-flooded hopper (Id., p. 5-11).

The Board should remand the permit to NDEP to require a top-down BACT analysis and BACT limits and compliance monitoring for fugitive dust emissions.

D. The Final Permit and the BACT Analysis Do Not Require BACT Based On Maximum Control Efficiency

Petitioner commented that the BACT analysis was flawed for a number of emission units and pollutants because it did not consider a control efficiency in setting a BACT limit. These include the BACT analyses for NO_x and SO₂ emissions from the PC boiler and the BACT analyses for PM/PM₁₀ emissions from materials handling sources. Pet. Ex. D, Sec. I.A.3, p. 15 (NO_x); Sec. I.B.3, p. 21 (SO₂); Sec. I.E.1.b, p. 47 (material handling).

NDEP failed to respond to Petitioner's comments. Instead, NDEP argued that a control efficiency does not need to be included in the permit. Response, pp. ACE-10, ACE-15, ACE-30. This is non-responsive. A limit must be based on a control efficiency representing the "maximum degree of reduction" that is achievable. 40 CFR § 52.21(b)(12). NDEP's failure to respond is grounds for remand. See In re Prairie State Generation Station, PSD Appeal No. 05-02 (EAB, March 25, 2005).

The definition of BACT requires that the emission limit be based on "the maximum degree of reduction." 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12). Even though the definition of BACT is based on a "case-by-case" determination, "taking into account energy, environmental, and economic impacts and other costs," the definition of BACT requires that the "maximum

degree of reduction" be determined. Id. One must first identify the "degree of reduction" for each candidate BACT level that is evaluated in making a BACT determination.

The top-down BACT process described in the NSR Manual lays out the process to identify the emission limit corresponding to the maximum degree of reduction. NSR Manual, p. B.5. Step 3 of the top-down process requires that technically feasible control options be ranked by control effectiveness.³⁰ NSR Manual, p. B.7-B.8. The ranking requires that the range of control, control level for the subject BACT analysis, and corresponding emission limit be tabulated. Id. A sample ranking is shown in the NSR Manual, Table B-2 and p. B.27.

The record in this case does not contain a ranking of emission limits by control efficiency, which is required to determine an emission limit based on the maximum degree of reduction that is achievable. Thus, there is no evidence that NDEP selected the subject emission limits based on "degree of reduction."

NDEP cannot determine if BACT has been required without considering the degree of reduction. Since an important aspect of the definition of BACT was ignored, NDEP's decision is arbitrary and capricious. Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43, 13 ELR 20672 (1983) (normally, an agency action would be arbitrary and

³⁰ The terms "degree of reduction," control level, control efficiency, control effectiveness, percent pollutant removal or removed and other similar terms all have the same meaning, namely the amount of the pollutant that is removed by a given control device.

capricious if the agency, inter alia, "entirely failed to consider an important aspect of the problem.")

Further, the BACT analysis (Pet. Ex. J, Ap., Appx. 10), application forms (Pet. Ex. J, Ap., Appx. 3, 4), and emission calculations (Pet. Ex. J, Ap., Appx. 5) do not even disclose the assumed control efficiency assumed for fabric filters and bin vent filters. Petitioner submitted evidence that BACT analyses for other facilities indicate that the control efficiency for fabric filters and bin vent filters for coal handling facilities should be no smaller than 99.9 percent. Pet. Ex. D, Ex. 38: Thoroughbred BACT analysis.³¹

Thus, the Board should remand the permit to NDEP to revise the BACT analyses to perform a proper top-down BACT analysis that identifies and ranks control options by control efficiencies and to revise the permit to require that the BACT limit represent the maximum control efficiency achievable.

E. Compliance Was Improperly Exempted During Startup And Shutdown

Petitioner commented that the draft permit appeared to exempt periods of startup and shutdown of the PC boiler from compliance with BACT emission limits. According to the draft permit, "[o]perations during periods of startup, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the

³¹ Kentuckiana Engineering Company, Prevention of Significant Deterioration, Title V Operating Permit & Phase II Acid Rain Joint Application, Thoroughbred Generating Station, Muhlenberg County, Kentucky, February 28, 2001

applicable standard..." Pet. Ex. C, Draft Permit, Sec. V.A.4.a(11), p. V-5. Further, the VOC limit for the PC boiler only applies "during normal boiler operation." Pet. Ex. C, Draft Permit, Sec. V.A.2.a(16), p. V-2.

NDEP's response largely ignores Petitioner's comment. Although NDEP states that "the applicant must maintain compliance with all limits in the permit, at all times that the unit is operating, including start-ups and shut-downs," Pet. Ex. I, Responses to ACE Comments, p. ACE-34, the final permit continues to exclude periods of startup and shutdown from BACT limits. Pet. Ex. A, Final Permit, Sec. V.A.4.a(11), p. V-5; Pet. Ex. A, Final Permit, Sec. V.A.2.a(16), p. V-2. Rather than modify the permit to require that BACT apply continuously, NDEP did not change the permit in any way. This is legal error. BACT limits cannot be waived. Absent additional safeguards the final permit fails to require BACT during periods of startup and shutdown.

BACT emission limits must be met on a continual basis "at all levels of operation," demonstrate protection of short term ambient standards and be enforceable as a practical matter. NSR Manual, p. B.56. The USEPA has consistently defined startup and shutdown to be part of the normal operation of a source.^{32,33} The USEPA has concluded that "[w]ithout clear definition

³² Letter from Kathleen M. Bennett, Office of Air, Noise and Radiation, to Assistant Administrator for Air, Noise and Radiation Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1982 (Bennett 9/28/82).

and limitations, these automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment.”³⁴ Pet. Ex. D, p. 52. Accordingly, it is reasonable to expect that careful planning will eliminate violations on emission limitations during such periods.

Thus, the Board should remand the permit to NDEP to remove the caveat on the VOC PC boiler limit, to clarify that all emission limits apply during startup and shutdown and to require compliance testing during these periods.

II. THE FINAL PERMIT IS NOT ENFORCEABLE

Petitioner commented that NDEP's permit is not enforceable. Incredibly, NDEP did not respond by demonstrating that the permit is enforceable. Instead, NDEP insisted that testing to demonstrate compliance with the PSD permit does *not* need to be included in the PSD Operating Permit to Construct. See, i.e., Pet. Ex. I, Responses to ACE Comments, pp. ACE-21, ACE-32, ACE-57. NDEP stated that testing to demonstrate compliance “will be required in the subsequent Title V operating permit.” Pet. Ex. I, Responses to ACE Comments, pp. ACE-21. NDEP's response is based on a conclusion of law that is clearly erroneous. The Board should

³³ Letter from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, to Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15, 1983 (Bennett 2/15/83).

³⁴ Id.

remand the permit to NDEP to require that the BACT emission limits in the PSD permit be made federally enforceable. See 40 C.F.R. § 124.19(a)(1)-(2).

A. Legal Requirement For Enforceability

The Clean Air Act requires all major stationary sources subject to PSD review to obtain a construction and operating permit before commencing construction. 42 U.S.C. §§ 7470-7479. To obtain a PSD permit, an applicant must, among other things, commit to installing BACT. See 7475(a)(4); 40 C.F.R. § 52.21(j).

A BACT determination consists of three parts—the emission limit, the control technology that the emission limit is based on, and the compliance provisions. See NSR Manual, p. B.56. The heart of the PSD permitting process is establishing enforceable limits to ensure that BACT determinations are implemented. Without enforceable limits, the permit is a hollow promise. BACT emission limits must be met on a continual basis at all levels of operation and must be federally enforceable, which requires practical enforceability.³⁵ See U.S. v. Louisiana-Pacific Corp., 682 F. supp. 1122, Civil Action No. 86-A-1880 (D. Colorado, March 22, 1988); 40 C.F.R. § 52.21(b)(17); NSR Manual, p. B.56. Practical enforceability means the source must be able to show continuous compliance with each limitation or

³⁵ In this appeal, the terms “enforceable” and “enforceable as a practical matter” are used interchangeably.

requirement.³⁶ Adequate testing, monitoring, and record-keeping must be included in the permit. See NSR Manual, pp. A.5-A.6.

Nevada's PSD Delegation Agreement requires that NDEP follow USEPA guidance. Pet. Ex. P, p. 2 ("NDEP will follow all PSD policy, guidance, and determinations issued by EPA for implementing the federal PSD program..."). The USEPA's NSR Manual requires that:

the reviewing agency must establish an enforceable emission limit for each subject emission unit at the source and for each pollutant subject to review that is emitted from the source . . .

The emissions limits must be included in the proposed permit submitted for public comment, as well as the final permit. BACT emission limits or conditions must be met on a continual basis at all levels of operation (e.g., limits written in pounds/MMBtu or percent reduction achieved), demonstrate protection of short term ambient standards (limits written in pound/hour) and be enforceable as a practical matter (contain appropriate averaging times, compliance verification procedures and recordkeeping requirements). Consequently, the permit must:

- be able to show compliance or noncompliance (i.e., through monitoring times of operation, fuel input, or other indices of operating conditions and practices); and
- specify a reasonable compliance averaging time consistent with established reference methods, contain reference methods for determining compliance, and provide for adequate reporting and recordkeeping so that the permitting agency can determine the compliance status of the source.

NSR Manual, p. B.56.

³⁶ See, e.g., "Guidance on Limiting Potential to Emit in new Source Permitting," from Terrell F. Hunt, Associate Enforcement Counsel, OECA, and John Seitz, Director, OAQPS, to EPA Regional Offices (June 13, 1989)

The USEPA's NSR Manual also explains that emission and operational limits "must be clearly expressed, easily measurable, and allow no subjectivity.... Such limits should be of a short term nature, continuous and enforceable." NSR Manual, p. H.5.

The USEPA's NSR Manual further clarifies the meaning of "enforceability." It provides:

Compliance with any limitation must be able to be established at any given time. When drafting permit limitations, the writer must always ensure that restrictions are written in such a manner that an inspector could verify instantly whether the source is or was complying with the permit conditions. Therefore, short-term averaging times on limitations are essential.

Emission limits should reflect operation of the control equipment, be short-term, and, where feasible, the permit should require a continuous emissions monitor. Blanket emissions limits alone (e.g., tons/yr, lb/hr) are virtually impossible to verify or enforce, and are therefore not enforceable as a practical matter.

When permits contain production or operational limits, they must also have requirements that allow a permitting agency to verify a source's compliance with its limits. These additional conditions dictate enforceability and usually take the form of recordkeeping requirements.

NSR Manual, App. C, pp. c.3 - c.5.

Petitioner commented that 1) the PM BACT limit is not enforceable, 2) the permit's monitoring frequency is not adequate to ensure enforceability of numerous emission limits in the permit, 3) monitoring is not representative of routine operation to ensure enforceability, 4) additional PM monitoring is required, 5) indirect, or surrogate, monitoring should be specified when adequate direct monitoring is not feasible, 6) monitoring is not adequate to

demonstrate compliance with BACT and other emission limits for materials handling operations, 7) emission limits are not practically enforceable, and 8) recordkeeping and reporting are inadequate to assure continuous compliance. These issues and NDEP's responses to each are discussed below.

B. The PM/PM10 BACT Limit Is Not Enforceable

Petitioner commented that the PM/PM10 BACT emission limits based on a 24-hour rolling average in the draft permit are not clearly enforceable because compliance testing is infrequent. Pet. Ex. D, pp. 41. Specifically, the draft Permit only requires two stack tests over the life of the facility, one within 60 days of startup and a second after 7,000 hours of operation. Pet. Ex. C, Draft Permit, Sec. V.A.4.a(1) and (2), p. V-4. The draft permit does not establish *any* method to determine compliance at other times. Thus, the BACT limits are not enforceable as a practical matter.

In response, NDEP did not claim that the BACT limits are enforceable in the final permit. NDEP stated that the facility will be required to conduct monitoring and perform additional stack tests, but that such monitoring and stack tests will not be included in the final permit. Pet. Ex. I: Responses to ACE Comments, p. ACE-21. Instead, the facility will submit "a plan" for Compliance Assurance Monitoring stipulations, and "periodic sources tests will be required in the subsequent Title V operating permit." Id. NDEP stated that Petitioner "misunderstands" the intent of a PSD operating permit to construct and that the Title V permit will contain the long-term testing for

the facility. Pet. Ex. I, Responses to ACE Comments, p. A-26. Actually, it is NDEP that “misunderstands” the clear language of the law. NDEP’s response is incorrect and illegal.

NDEP’s response is inadequate for two reasons 1) NDEP fails to respond to the comment that a 24-hour average cannot be calculated with only two data points collected in 30 plus years of operation and 2) NDEP’s failure to require adequate monitoring and compliance conditions in the final permit is clear legal error.

First, NDEP must respond regarding the appropriate and required testing to ensure that the facility complies with the 24-hour rolling average. Petitioner commented that compliance cannot be determined for a 24-hour average using only two data points based on two stack tests over the entire life of the facility’s operation. Pet. Ex. D, p. 33. The averaging time for constituents for which compliance is determined by stack testing is normally the length of the stack test used to demonstrate compliance. Petitioner submitted evidence that particulate matter stack testing normally consists of three one-hour tests and that BACT determinations are thus normally based on a 3-hour average. Pet. Ex. D, Ex. 35³⁷; Ex. 33.³⁸ NDEP’s failure to respond substantively to this issue is ground for remand.

³⁷ Iowa Department of Natural Resources, Air Quality PSD Construction Permit, Notice of MACT Approval, MidAmerican Energy Company, CBEC 4, Original Permit Issued June 17, 2003.

³⁸ Wisconsin Bureau of Air Management, Air Pollution Control Construction Permit, Wisconsin Public Service Corporation -- Weston Plant, Permit No. 03-RV-248, October 19, 2004.

Second, NDEP's failure to require adequate monitoring and compliance conditions in the final permit is clear legal error. As set forth in detail above, the heart of the PSD permitting process is establishing enforceable limits to ensure that BACT determinations are implemented. BACT emission limits must be met on a continual basis at all levels of operation and must be enforceable as a practical matter. See U.S. v. Louisiana-Pacific Corp., 682 F. supp. 1122, Civil Action No. 86-A-1880 (D. Colorado, March 22, 1988); see 40 C.F.R. § 52.21(b)(17); see NSR Manual, p. B.56. Without enforceable limits, the permit is a hollow promise.

The Title V program under the Clean Air Act, set forth at 42 U.S.C. Sections 7661 to 7661f, is a completely separate program from the PSD program, set forth at in 42 U.S.C. Sections 7470-7479. A Title V permit does not replace the agency's obligation to write a complete pre-construction permit under the PSD program. Instead, the purpose of Title V is to require major sources to obtain facility-wide operating permits, which consolidate all air pollution requirements applicable to the facility into a comprehensive permit that details all aspects of a source's air emission activities. See 42 U.S.C. §§ 7661-7661f. Thus, the goal of the Title V permit program is to create single document containing all of a facilities air emission requirements, not to create a new document with new requirements, as claimed by NDEP.

NDEP's argument also flies in the face of the USEPA's recent interpretation that the Title V permit program cannot include any new requirements not set forth in a construction and operation permit. On January 22, 2004, the USEPA announced its interpretation of the "umbrella monitoring" rules in 40 C.F.R. 70.6(c)(1) and 71.6(c)(1)³⁹ for federal operating permits program under title V of the Clean Air Act:

EPA has determined that the correct interpretation of the umbrella monitoring rules is that they do not establish a separate regulatory standard or basis for requiring or authorizing review and enhancement of existing monitoring independent of any review and enhancement as may be required under separate provisions of the operating permits rules. As explained in this action, the umbrella monitoring rules do not provide a basis for adding monitoring to title V permits independent of monitoring required under existing federal air pollution control rules and State implementation plan (SIP) rules (i.e., monitoring required under applicable requirements), including monitoring required under the compliance assurance monitoring (CAM) rule where it applies, and such monitoring as may be required under the periodic monitoring rules.

69 Fed. Reg. 3202 (January 22, 2004). Thus, NDEP cannot rely on the Title V permit to add conditions that are not included in the PSD permit.

Finally, a Compliance Assurance Monitoring plan, or CAM plan, submitted after a final PSD permit has been issued is not a replacement for federally enforceable permit conditions. Moreover, monitoring in a plan submitted outside of the public review process is clearly improper. Finally, it

³⁹ The "umbrella monitoring" rules require that each title V permit contain, "[c]onsistent with paragraph (a)(3) of this section, compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." 40 C.F.R. §§ 70.6(c)(1) and 71.6(c)(1).

is not subject to public review and it is not in the permit. It is not a replacement for enforceability.

Permit conditions for PM/PM10 must be established to enforce a BACT determination. USEPA requires that "the reviewing agency must establish an enforceable emission limit for each subject emission unit at the source." NSR Manual, p. B.56, emphasis added. This limit must "contain appropriate averaging times, compliance verification procedures and recordkeeping requirements." *Id.* Finally, this enforceable limit must be included in the draft permit, which is submitted for public comment, as well as in the final permit. *Id.*

In sum, the final permit does not even attempt to provide provisions to ensure compliance with the PM/PM10 limit. Therefore, Petitioner requests that the Board remand the permit to NDEP.

C. Monitoring Frequency For Numerous Emissions Is Not Adequate To Ensure Enforceability

Petitioner commented that the permit's monitoring frequency is not adequate to ensure enforceability of numerous emission limits in the permit. Pet. Ex. D, p. 88. We commented that the final permit must require continuous emission performance monitoring and recordkeeping where feasible.⁴⁰ See NSR Manual, pp. H.10, I.3; see Pet. Ex. D, p. 88.

⁴⁰ See Pet. Ex. 4, p. 88, fn.116, citing, e.g., "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act," from John Seitz, Director, OAQPS, to EPA Regional Offices (January 25, 1995) <http://www.epa.gov/Region7/programs/artd/air/nsr/nsrmemos/ptememo.pdf>; "Guidance on Limiting Potential to Emit in new Source Permitting," from Terrell F. Hunt, Associate

Specifically, Petitioner commented that the draft permit did not require any stack testing for specific BACT emission limits on Systems 7 and 10-11. The draft permit only required a single stack test over the 30 plus year operating life of the facility for emissions of PM/PM10 from Systems 5 and 6 (Pet. Ex. C: Draft Permit, Sec. V.E.4, pp. V-24 and Sec. V.F.4, V-26) and PM, PM10, SO₂, NO_x, CO, and VOCs from the diesel firewater pump. Pet. Ex. C, Draft Permit, Sec. V.O.4.a(5), p. V-42. The final permit is largely unchanged. See Pet. Ex. A: Final Permit, Sec. V.E.4, pp. V-25, Sec. V.F.4, V-27, and Sec. V.O.4.a(5), p. V-43.

Petitioner also commented that the draft Permit only required that stack tests be conducted twice over the life of the facility, within the first year of operation for the following:

- PM emissions from the PC Boiler [Condition V.A.2.a(3)]
- PM10 emissions from the PC Boiler [Condition V.A.2.a(4)]
- VOCs emissions from the PC Boiler [Condition V.A.2.a(16)]
- Sulfuric acid mist emissions from the PC Boiler [Condition V.A.2.a(21)]
- PM emissions from the combustion turbines [Condition V.B.2.a(2)]
- PM10 emissions from the combustion turbines [Condition V.B.2.a(4)]
- VOC emissions from the combustion turbines [Condition V.B.2.a(12)]
- Sulfur and SO₂ emissions from the combustion turbines [Conditions V.B.2.a(5) - (7)]

Enforcement Counsel, OECA, and John Seitz, Director, OAQPS, to EPA Regional Offices (June 13, 1989) <http://www.epa.gov/Region7/programs/artd/air/nsr/nsrmemos/limitpotl.pdf>

- Sulfuric acid mist emissions from the combustion turbines [Condition V.B.2.a(13)]
- PM, PM10, SO₂, NO_x, CO, and VOC emissions from the firewater pump engine [Condition V.O.2]

Pet. Ex. C, Draft Permit, Secs. V.A.4.a, V.B.4.a. Again, the final permit remains largely unchanged. Pet. Ex. A, Final Permit, Secs. V.A.4.a, V.B.4.a.

In a one sentence response, NDEP stated "[t]he testing differences between the OPTC [Operating Permit to Construct] and the Title V OP [Operating Permit] have been addressed." Pet. Ex. I, Responses to ACE Comments, ACE-57. Again, NDEP's failure to require monitoring to ensure enforceability of the PSD permit *in the PSD permit itself* constitutes clear legal error.

The law is clear that BACT emission limits must be federally enforceable, which requires practical enforceability. See U.S. v. Louisiana-Pacific Corp., 682 F. supp. 1122, Civil Action No. 86-A-1880 (D. Colorado, March 22, 1988); see 40 C.F.R. § 52.21(b)(17); see NSR Manual, p. B.56. Practical enforceability means the source must be able to show continuous compliance with each limitation or requirement.⁴¹ According to the USEPA's NSR Manual,

BACT emission limits or conditions must be met on a continual basis at all levels of operation (e.g., limits written in pounds/MMbtu or percent reduction achieved), demonstrate

⁴¹ See, e.g., "Guidance on Limiting Potential to Emit in new Source Permitting," from Terrell F. Hunt, Associate Enforcement Counsel, OECA, and John Seitz, Director, OAQPS, to EPA Regional Offices (June 13, 1989)

protection of short term ambient standards (limits written in pound/hour) and be enforceable as a practical matter (contain appropriate averaging times, compliance verification procedures and recordkeeping requirements).

NSR Manual, p. B.56. The NSR Manual also explains that a PSD permit must require CEMs, where feasible, and that "blanket emission limits," such as those in the Newmont PSD permit, are not federally enforceable:

Emission limits should reflect operation of the control equipment, be short-term, and, where feasible, the permit should require a continuous emissions monitor. Blanket emissions limits alone (e.g., tons/yr, lb/hr) are virtually impossible to verify or enforce, and are therefore not enforceable as a practical matter.

NSR Manual, App. C, pp. c.4 - c.5.

In this case, Petitioner commented that two tests during the first year of operation is not adequate to assure continuous compliance over the life of the facility. Pet. Ex. D, p. 89. Two tests would measure only about 0.002 percent of the actual operating hours of the facility, assuming a 30 year plant life. Id. Further, emissions from these sources can increase with age and performance of control equipment can degrade with age. Id. Coal quality may also degrade as the prime coal resources are consumed. Thus, NDEP's final permit limits that rely on limited stack testing under new and clean conditions during the first year of operation are not continuously enforceable over the life of the facility.

D. Stack Testing Is Not Adequate To Determine Compliance

In addition to commenting that the monitoring frequency is not adequate to ensure enforceability, Petitioner also commented that what little

monitoring is required is not representative of routine operation to ensure enforceability. Pet. Ex. D, p. 90-91. Specifically, monitoring is not representative of routine operation since stack testing is not required during worst-case conditions. Id.

The permit provides that compliance with all BACT limits for fired sources, except NO_x, SO₂, and CO emission from the PC boiler, will be determined using stack tests. According to the NSR manual, “[i]nitial and subsequent performance tests should be conducted at worst-case operating (non-malfunction) conditions for all emission units.” NSR Manual, p. H.10. Petitioner commented that the draft permit requires that “performance tests will be conducted at the maximum operating heat input rate...Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a test of performance...” Pet. Ex. C, Draft Permit, Sec. V.A.4.a(11), p. V-5. The “maximum operating heat input rate” does not represent worst-case conditions. Petitioner also commented that NDEP should require CEMS where feasible to demonstrate continuous compliance.

NDEP did not respond to Petitioner’s comment that stack testing is not conducted during worst-case conditions and thus, is not adequate to ensure compliance. Pet. Ex. I, Responses to ACE Comments, p. ACE-58. In a three sentence response, NDEP stated that CEMS and continuous opacity monitors (COMS) are required “as appropriate.” Pet. Ex. I, Responses to ACE

Comments, p. ACE-58. NDEP further responded that the limits in the permit “must be adhered to during all operating conditions.” Id. NDEP also stated that all stack tests will be conducted “in accordance with the appropriate EPA method.” Id.

NDEP’s response is clearly inadequate. NDEP provided absolutely no support for its claim that that CEMS is “not appropriate” for Newmont. In addition, the EPA method is not at issue. Moreover, the permit remains unchanged. See Pet. Ex. A, Final Permit, Sec. V.A.4.a(11), p. V-5. The final permit does not demonstrate that the permit limits “must be adhered to during all operating conditions.” NDEP’s response is conclusory and without support.

Unlike NDEP’s response, Petitioner presented substantial evidence in its comments that “[m]annual stack tests are generally performed under optimum operating conditions, and as such, do not reflect the full-time emission conditions from a source.” 40 Fed.Reg. 46241 (October 6, 1975). Stack tests are a small slice of operation, typically lasting only 1 to 3 hours. See Pet. Ex. D, p. 90. A widely used handbook on CEMs notes, with respect to PM₁₀ source tests, that: “[d]ue to the planning and preparations necessary for these manual methods, the source is usually notified prior to the actual testing. This lead time allows the source to optimize both operations and control equipment performance in order to pass the tests.”⁴² Id. Thus, stack

⁴² James A. Jahnke, Continuous Emission Monitoring, 2nd Ed., John Wiley & Sons, Inc., New York, 2000, at p. 241.

tests generally follow maintenance and tuning, are conducted at maximum load, which is not worst-case, and ignore periodic excursions due to startups, shutdowns, and soot blowing, which are part of routine operations. Id.

In this case, Petitioner pointed to evidence that the emission calculations indicate that emissions are higher during startup than normal operations. Pet. Ex. J, Ap., Appx. 5, p. 5-4. Similarly, PM/PM10 emissions during soot blowing, used to clean boiler tubes and part of normal operations, are much higher than full load operation. Pet. Ex. D, Ex. 36. Testing should be conducted during soot blowing,⁴³ but is not required by the final permit.

In sum, permit limits apply continuously, including during times of worst-case conditions. Thus, the Board should remand the permit to NDEP to remove the provision that performance tests be conducted at the maximum operating heat input rate and to require testing under worst-case, non-malfunction conditions.

E. Additional PM Monitoring Should Be Required

Petitioner commented that NDEP must require continuous emission monitors ("CEMS") where feasible to demonstrate continuous compliance for particulate matter. Pet. Ex. D, pp. 91-93. CEMS is particularly important in this case where NDEP set a PM/PM10 BACT limit based on a 24 hour rolling

⁴³ Memorandum from John S. Seitz to David Kee, Re: Inclusion of Soot-Blowing Emissions in Subpart D Compliance Testing, August 31, 1987; Memorandum from Kathleen M. Bennett to Directors, Re: Restatement of Guidance on Emissions Associated with Soot-Blowing, May 7, 1982; Memorandum from Edward E. Reich to Sandra S. Gardebring, Re: Representative Testing Requirements, November 21, 1980; Memorandum from Edward E. Reich to Leslie Carothers, Re: Integration of Soot-Blowing Emissions with Routine Operating Data for Existing Facilities, March 12, 1979; Memorandum from Edward E. Reich to Enforcement Division Directors, Re: NSPS Determination - Subpart D, March 6, 1979.

average. The 24 hour rolling average is a much longer averaging time than is normally specified and is much longer than the testing method required to determine compliance.

NDEP responded that “[n]either the Clean Air Act nor Nevada regulations require the use of [CEMS] for particulate matter.” Pet. Ex. I, Responses to ACE Comments, p. ACE-59. NDEP also stated, without any support, that “[o]ther regulatory agencies have also indicated that PM CEMS are not advanced enough to provide reliable and accurate data at a reasonable cost.” Id. NDEP then summarily concluded that it will not require CEMS. Instead, NDEP stated that the facility will use continuous opacity monitors (“COMS”), citing to an out-of-context and irrelevant discussion on the use of COMS for monitoring hazardous air pollutants at lime manufacturing plants. See Pet. Ex. I, Responses to ACE Comments, p. ACE-59, citing 70 Fed. Reg. 7905, 7908 (February 16, 2005). NDEP’s response is incorrect, conclusory and nonsensical.

First, USEPA’s guidance in implementing the PSD provisions of the Clean Air Act requires the use of CEMS, where feasible. USEPA Region 9 delegated partial authority to the State of Nevada to implement and enforce the federal PSD program. See 68 Fed. Reg. 52837 (September 8, 2003). PSD permits issued pursuant to a delegation agreement are considered federally-issued permits for purposes of Board review. See 40 C.F.R. § 124.41. Nevada’s PSD Delegation Agreement requires that NDEP follow USEPA

guidance. See Pet. Ex. P, p. 2 (“NDEP will follow all PSD policy, guidance, and determinations issued by EPA for implementing the federal PSD program...”). USEPA’s guidance is set forth in the NSR Manual.

According to the NSR Manual, “[e]mission limits should reflect operation of the control equipment, be short-term, and, where feasible, the permit should require a continuous emissions monitor.” NSR Manual, App. C, pp. c.4 - c.5. The hierarchy for specifying monitoring to determine compliance is as follows: (1) continuous direct measurement where feasible; (2) initial and periodic direct measurement where continuous monitoring is not feasible; (3) use of indirect monitoring, e.g., surrogate monitoring, where direct monitoring is not feasible; and (4) equipment and work practice standards where direct and indirect monitoring are not feasible. NSR Manual, pp. H.10, I.3; see Alaska v. US EPA, 298 F.3d 814 (9th Cir., July 30, 2002). Thus, NDEP must require CEMS, where feasible.

NDEP provided no evidence that CEMS is not feasible for Newmont. NDEP’s allegations that PM CEMS are not advanced enough to provide reliable data at a reasonable cost and COMS can serve as “an acceptable surrogate” are unsupported by the record. NDEP’s only explanation is that the USEPA published a Federal Register notice supporting the use of COMS, instead of CEMS for monitoring compliance with PM emission limits. Pet. Ex. I, Responses to ACE Comments, p. ACE-59. NDEP’s explanation is wildly inaccurate.

The Federal Register notice cited by NDEP is a request for comments on potentially inadequate monitoring under Title V of the Clean Air Act. Id.; see Fed. Reg. 7905, 7908 (February 16, 2005). The notice is not a final rule related to PSD permits, nor is it even guidance for interpreting or applying PSD monitoring requirements.

In addition, the discussion included in NDEP's responses to comments is taken out of context and irrelevant to the required monitoring for PM in a PSD permit. Specifically, NDEP stated that EPA "argued...that a properly calibrated and maintained COMS is sufficient to demonstrate long term PM control device performance..." Pet. Ex. I, Responses to ACE Comments, p. ACE-59. However, NDEP omitted that EPA "argued, *for this standard*, that a properly calibrated and maintained COMS is sufficient..." 70 Fed. Reg. at 7908 (emphasis added). "This standard" refers to standards for monitoring National Emission Standards for Hazardous Air Pollutants (NESHAPs) for lime manufacturing plants. Specifically, USEPA stated:

For example, in the final NESHAP for lime manufacturing plants published on January 5, 2004 (69 FR 394), we allowed use of a continuous opacity monitoring systems (COMS) to serve as a surrogate for HAP metals instead of requiring continuous particulate mass monitoring. ...EPA agreed that COMS cannot directly measure PM emissions, but argued, *for this standard*, that a properly calibrated and maintained COMS is sufficient to demonstrate long term PM control device performance, since the purpose of the monitoring is to demonstrate with reasonable certainty that the PM control device is operating as well as it did during the PM emission test used to demonstrate compliance. *For this standard*, EPA also justified the use of a COMS because PM continuous emission monitoring systems (CEMS) and PM detectors (bag leak detectors) are significantly more expensive to

purchase and maintain than a COMS, and because PM CEMS measure concentration, while the basis of the standard is mass per unit of feed input.

70 Fed. Reg. at 7908 (emphasis added). NDEP's reliance on this standard is misplaced in this case.

The particulate matter from lime manufacturing is different from particulate matter from coal fired power plants. Opacity depends upon the physical characteristics of the particles -- their shape, color, and surface properties. These parameters are much more uniform for lime manufacturing than coal-fired boilers. For the latter, particle characteristics that can affect opacity vary depending upon condition of the low NO_x burners (carbon content), soot blowing (large masses of dark particles released into flue gas), coal source, and startup and shutdown operations. A relationship established between opacity and PM during full load operation, for example, would not apply during soot blowing or startup. Clearly, the use of COMS as surrogate monitoring for HAP metals does not support its preference as use for monitoring PM from a coal-fired power plant.

The NDEP, in this response, is advocating the use of opacity as a surrogate or indicator for PM/PM₁₀. However, the final permit does not implement this recommendation, and, in fact, is silent on the use of opacity as an indicator for PM/PM₁₀. The following four reasons show that COMS is not sufficient as a surrogate and that additional PM monitoring is required.

First, indicator monitoring is conventionally used for “[o]nly those parameters that exhibit a correlation with source emissions...” NSR Manual, p. H.6. The final permit does not require that Newmont collect data to develop a relationship between PM/PM and opacity. Nor does the final permit require that the relationship, once established, be used to determinate compliance.

Second, the final permit does not specify acceptable opacity ranges that assure compliance with the PM/PM10 BACT limit. The NSR Manual notes that “[w]henver possible, “never to be exceeded” values should be specified for surrogate compliance parameters.” NSR Manual, p. H.7.

Third, the final permit does not require that follow-up PM/PM10 testing be conducted to confirm an opacity exceedance. USEPA’s Objection to the Gannon (FL) Title V Permit was based on the failure to require such follow-up: “...the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of normal operating time. The Department should set the appropriate percentage of the operating time that would serve as trigger for this testing requirement.”⁴⁴

Fourth, the final permit does not state that a violation of a specific level of opacity constitutes a violation of the underlying BACT PM/PM10 limit. The response to comments is not an enforceable document, and,

⁴⁴ U.S. EPA Region 4 Objection, Proposed Part 70 Operating Permit, Tampa Electric Company, F.J. Gannon Station, Permit No. 0570040-002-AV.

unless the response is specifically implemented through enforceable permit conditions, it is a nothing more than a hollow promise.

The EPA has objected to numerous Title V permits, incorporating PSD requirements, for failure to address these issues when indicator monitoring is used to demonstrate compliance. For example, in the Tampa Electric Company's F.J. Gannon Station case, the EPA objected to the Title V permit, stating:

While the permit does include parametric monitoring of emission unit and control equipment operation in the O&M plans for these units... the parametric monitoring scheme that been specified is not adequate. The parameters to be monitored and the frequency of monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of normal operating time. The Department should set the appropriate percentage of the operating time would serve as trigger for this testing require.⁴⁵

Unless exceedances of established acceptable ranges trigger inspection, maintenance and prompt reporting, or are identified as a per se violation of the PM/PM10 level, opacity monitoring provides no extra compliance monitoring as a violation would not be identified and cured by the facility or

⁴⁵ U.S. EPA Region 4 Objection, Proposed Part 70 Operating Permit, Tampa Electric Company, F.J. Gannon Station, Permit No. 0570040-002-AV.

discovered and enforced by others. Thus, opacity monitoring using a COMS does not assure continuous compliance with the PM/PM10 BACT limit.

Finally, we note that NDEP's response to Petitioner's comment states that annual PM/PM10 testing would be required. Pet. Ex. I, Responses to ACE Comments, p. ACE-59. However, the final permit only requires two tests over the life of the facility.

Clearly, the standards for monitoring NESHAPs for lime manufacturing plants are irrelevant in this case. In addition, the final permit fails to implement NDEP's recommendation on using opacity as a surrogate or indicator for PM/PM10. NDEP provided no other evidence that CEMS is not appropriate for Newmont.

Petitioner, on the other hand, presented substantial evidence that CEMS are available and feasible for the filterable fraction of particulate matter. Pet. Ex. D, ACE Comments, pp. 91-92. We commented that CEMS have been widely used for many years in both the U.S. and other countries. Id. In fact, the EPA has promulgated performance standards, PS-11, for PM CEMS.⁴⁶ Id. at p. 92.

Petitioner also submitted evidence that CEMS have been required to monitor PM from coal-fired power plants in several Consent Decrees between the United States and various energy companies, including Wisconsin

⁴⁶ Performance Specification 11 - specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources, Federal Register, January 12, 2004.

Electric Power Company,⁴⁷ Virginia Electric and Power Company,⁴⁸ and Tampa Electric Company⁴⁹ and are currently in use on some of these facilities. Id. In addition, in the U.S., PM CEMS have been installed and evaluated on liquid hazardous waste burning sources, cement kilns, copper smelters, a glass furnace, and oil- and coal-fired boilers. Id. In Canada, many PM CEMS are in use at pulp and paper mills. Id. In England, PM CEMS are used at municipal waste combustors, power plants, and cement kilns. Id. In Germany, PM CEMS are required on coal- and oil-fired power plants larger than 50 MW and gas-fired units larger than 100 MW and on waste incinerators. Id. In Denmark, PM CEMS are used at coal-fired power plants.⁵⁰ Id. By claiming that PM CEMS is not appropriate for Newmont without providing any analysis and support, NDEP has failed to respond to Petitioner's significant comment, as required by 40 C.F.R. § 124.17(a).

Thus, the Board should remand the permit to NDEP to either require PM CEMS to determine compliance with the filterable portion of the PM limit for the PC boiler or to demonstrate why CEMS is not feasible for Newmont.

⁴⁷ United States of America et al. v. Wisconsin Electric Power Company, Civil Action No. 03-C-0371, In the U.S. District Court for the Eastern District of Wisconsin, Amended Consent Decree Sec. VI.C. See

<http://www.epa.gov/compliance/resources/decrees/civil/caa/wepcoamend-cd.pdf>.

⁴⁸ United States of America et al. v. Virginia Electric Power Company, In the U.S. District Court, Eastern District of Virginia, Consent Decree, Sec. VII, Parag. 85. See:

<http://www.epa.gov/compliance/resources/decrees/civil/caa/vepcod.pdf>.

⁴⁹ United States of America v. Tampa Electric Company, Civil Action No. 99-2524 CIV-T-23F, In the U.S. District Court, Middle District of Florida, Consent Decree, Sec. IV.B, Parag. 32.E. See: <http://www.epa.gov/compliance/resources/decrees/civil/caa/tecocd.pdf>.

⁵⁰ U.S. EPA, Current Knowledge of Particulate Matter (PM) Continuous Emission Monitoring, Report EPA-454/R-00-039, September 2000.

<http://www.epa.gov/ttn/emc/cem/pmccemsknowfinalrep.pdf>.

F. Surrogate Monitoring Should Be Required

Indirect, or surrogate, monitoring should be specified when adequate direct monitoring is not feasible. See NSR Manual, pp. H.6, I.3 (“Where continuous, quantitative measurements are infeasible, surrogate parameters must be expressed in the permit.”) Commonly used surrogates include carbon monoxide for VOC and sulfur dioxide for the acid gases -- sulfuric acid mist, and baghouse and scrubber operating parameters for metals associated with particulate matter. Pet. Ex. D, p. 94. Thus, Petitioner commented that NDEP should require the use of these surrogates to determine continuous compliance with the proposed limits on VOCs and sulfuric acid mist.

NDEP cursorily responded “[t]he permit adequately addresses compliance requirements.” Pet. Ex. I, Responses to ACE Comments, p. ACE-60. However, the permit only requires a single stack test over the life of the facility to determine compliance with VOCs and sulfuric acid mist limits. NDEP is obligated to respond substantively by showing that there is a method of ensuring continuous compliance. Since NDEP failed to respond to Petitioner’s significant comment, as required by 40 C.F.R. § 124.17(a), the Board should remand the permit to NDEP.

G. Monitoring Is Not Adequate To Demonstrate Compliance With BACT And Other Emission Limits For Materials Handling Operations

NDEP did not require adequate monitoring to demonstrate compliance with BACT and other emission limits for materials handling operations. Pet.

Ex. D, pp. 49-50. The final permit sets BACT emission limits in grains per dry standard cubic feet ("gr/dscf"), pounds per hour ("lb/hr"), or tons per year ("ton/yr"), but only requires weekly visual observations to determine compliance, with the exception of baghouse B (venting S2.006 – S2.001) and baghouse C (venting sources S2.012 – S2.014). Pet. Ex. A, Final Permit, pp. V-24 to V-38. Petitioner commented that the only monitoring required to determine compliance with these emission limits – monitoring the quantity of material handled, periodic inspections, and qualitative weekly to monthly visual observations – is not adequate to ensure the limits are enforceable. Pet. Ex. D, Sec. I.E.2., pp. 49-50. Petitioner commented that there are three main reasons why these limits are not enforceable. NDEP did not adequately respond to any of these reasons.

1. Visual Inspections Are Not Adequate

The draft and final permit require weekly to monthly visual inspection as the primary compliance method for all material handling units. Pet. Ex. A, pp. V-24 to V-38. If visual emissions are visually observed, a Method 9 visible emissions test is conducted within 24 hours. Id. Petitioner commented that this is not adequate to demonstrate continuous compliance for four reasons.

First, weekly to monthly observations do not inform as to the presence or absence of visible emissions on the days that were not observed.

Second, the condition only requires "visual observations." The Permit does not contain any methods for visually observing opacity or any requirements that the observer be trained or certified to identify visual exceedances.

Third, the draft permit and NDEP's review of the permit do not contain any evidence that visual observations assure that the BACT emission limits of 0.01 or 0.02 gr/dscf are achieved. Petitioner commented that a stack test that measures actual emissions must be conducted to determine if the grain loading is achieved, and monitoring provisions for Systems 5 and 6, which also have grain loading limits, require Method 5 stack testing to determine compliance. Pet. Ex. D, p. 49.

Fourth, allowing a grace period of 24 hours in which to conduct Method 9 testing allows the facility to potentially continuously violate BACT and other emission limits for up to 24 hours. Id. Petitioner commented that the Permit should be revised to require the observer to be certified in Method 9 and to conduct the Method 9 test immediately upon observing visual emissions, not up to 24 hours later.

NDEP did not adequately respond to Petitioner's comments. First, NDEP asserts that for these units "if the control operations were to fail...the opacity of those emissions would dramatically stand out as something requiring correction." Pet. Ex. I, Responses to ACE Comments, p. ACE-32. However, even if control operations do not "fail," control equipment and

methods can degrade slowly over time, thus the need for continuous maintenance, monitoring, and recordkeeping. Equipment can cease to meet vendor specifications. Changes in personnel or operating procedures can affect emissions without dispatching a cloud of dust. A compliance method that can only identify catastrophic failure is not adequate to assure that the BACT limits are met continuously.

Second, opacity depends on the weather and position of the observer relative to the plume. At a minimum, visual observations obviously allow violations at night because one cannot observe "visible emissions" when it is dark out. The record contains no support for the underlying assumption that a visual observation at the proposed frequency would reveal anything about the PM/PM10 emissions in gr/dscf, lb/hr or ton/yr. The record also does not define "visual emissions."

Third, NDEP asserts that "observations of opacity are generally accepted as indications of emissions concerns." Pet. Ex. I, Responses to ACE Comments, p. ACE-32. None of the conditions necessary to assure that indicator monitoring is practically enforceable, as set out above, have been met for the material handling equipment.

Further, indicator monitoring is generally only acceptable where direct monitoring is impractical or in conjunction with test data. NSR Manual, p. I.3. The record contains no demonstration that direct monitoring is infeasible. In fact, direct monitoring is commonly used to measure emissions

from silo vents, such as those represented by the fly ash handling silo (Pet. Ex. A, p. V-28), recycle ash handling silos (Id., p. V-32), lime handling silo (Id., p. V-34), activated carbon handling silos (Id., p. V-36) and baghouses (Id., p. V-24, V-26).

Fourth, the subject monitoring conditions require that a Method 9 test be conducted to confirm any visual observations of opacity and corrective action taken. The only response to Petitioner's comment that 24 hours is not adequate is a reassertion that it is because "[a] 24-hour response period has generally been adequate to ensure controls; however the facility has the duty to correct any exceedances as soon as practicable, which may be sooner than 24 hours." Pet. Ex. I, Responses to ACE Comments, p. ACE-32. However, BACT does not grant a 24-hour waiver of BACT limits and the obligation to assure continuous compliance before a test is conducted.

In sum, NDEP merely restated its proposed monitoring for opacity, argued that "observations" of opacity suffice as compliance for these systems and that a 24-hour response period is adequate since the facility has the duty to correct any exceedances "as soon as practicable." Pet. Ex. I, Responses to ACE Comments, p. ACE-32. NDEP's response is clearly inadequate. NDEP fails to respond regarding lack of continuous monitoring, fails to respond regarding lack of methods and qualifications for visual observations, fails to respond regarding lack of assurance that BACT limits are achieved. Finally, visual observations of opacity are clearly not the same as requiring testing to

ensure compliance with PM/PM10 limits in gr/dscf, lb/hr, and ton/yr, which are set in the permit for materials handling operations. Nor does the "requirement" that the facility correct exceedances "as soon as practicable" provide any assurance that the facility will not violate BACT and other emission limits for up to 24 hours. The Board should remand the permit to NDEP to either substantively respond to Petitioner's comments and to ensure adequate enforceability of emission limits for materials handling operations.

2. One Stack Test Is Inadequate

The draft Permit requires a single stack test within 60 to 180 days of startup for some material handling emission units. Pet. Ex. C, Draft Permit, pp. V-25, V-27. A single stack test over the 30 plus year life of a facility that burns 1,085,000 tons per year of coal is not adequate to assure continuous compliance. The Permit should be modified to require at least annual stack tests for all material handling equipment controlled by a fabric filter.

In response, NDEP again stated "[t]he issue of OPTC compliance methods versus ongoing periodic compliance methods required by the subsequent Title V OP has been addressed." Pet. Ex. I, Responses to ACE Comments, p. ACE-32. Again, NDEP's response is clear legal error.

If the Board permits NDEP to wait until issuance of a Title V permit to require monitoring for the PSD BACT emission limits, NDEP and/or Newmont will then argue that the agency is not permitted by law to include any additional monitoring in the Title V permit. As set forth above, the Title

V permit program is a completely separate program from the PSD program. Compare 42 U.S.C. §§ 7661-7661f and 42 U.S.C. §§ 7470-7479. The purpose of Title V is to consolidate all air pollution requirements applicable to the facility from any individual and separate permits into a comprehensive permit that details all aspects of a source's air emission activities. See 42 U.S.C. §§ 7661-7661f. Moreover, the USEPA has recently concluded that Title V of the Clean Air Act does not authorize any new and independent type of monitoring in permits beyond what is required by existing operating permit. Pet. Ex. N, 69 Fed. Reg. 3201, 3202 (January 22, 2004). Thus, NDEP is clearly misguided and incorrect.

3. O&M Guidelines Not Provided

Petitioner commented that the draft Permit requires weekly inspections of the control equipment, according to the manufacturer's operation and maintenance guidelines for all material handling units except System 08. Pet. Ex. D, p. 50 and Ex. 39. The draft Permit does not summarize these guidelines and the permitting record is silent on these guidelines. The omission of these guidelines precludes public review and renders this permit requirement unenforceable as a practical matter.

NDEP simply disagreed and again improperly relied on the Title V permit process to require new monitoring. NDEP responded that it would be premature to include the manufacturer specifications in the PSD permit and that such specifications can be "more completely spelled out in an operating

permit, once the specific manufacturer is known." Pet. Ex. I, Responses to ACE Comments, p. 32. NDEP's reliance on the Title V permit process is clear legal error.

Petitioner's submitted a letter written by the USEPA to Ohio singling out this very issue. According to the USEPA, reliance on maintenance according to "manufacturer's specification" is an example of a requirement that is unclear and thus not enforceable. Pet. Ex. D, Ex. 39⁶¹ (Hodanbosi 11/21/01). The USEPA stated that "[t]hese steps [of manufacturer's specification] must be explained in detail in order for such a requirement to have any meaning." *Id.* Thus, the Board must remand the permit to NDEP to include specific monitoring set forth in manufacturer's guidelines in the PSD permit.

In sum, NDEP's final permit failed to include monitoring to demonstrate compliance with BACT and other emission limits for materials handling operations. In addition, NDEP failed either to respond substantively to Petitioner's comments that visual inspections are not adequate or to modify the permit to ensure adequate visual inspections. Finally, NDEP is legally wrong in its response that adequate monitoring for the material handling equipment need not be included in the PSD permit to assure compliance with BACT emission limits. Thus, the Board should remand the permit to NDEP.

⁶¹ Attachment to Letter from Bharat Mathur, EPA Region 5, to Robert F. Hodanbosi, Ohio EPA, November 21, 2001.

H. Emission Limits Are Not Practically Enforceable

According to the NSR manual, a PSD permit should contain at least two limits per pollutant – a maximum allowable emission rate per unit time, e.g., lb/hr, which reflects application of emission controls at maximum capacity, and an instantaneous emission limit in pounds per million Btus or parts per million. Pet. Ex. D, p. 95; NSR Manual, pp. B.56, H.5, I.2, I.4. Petitioner commented that emission limits are not practically enforceable because the permit contains several limits that are expressed only in pounds per hour and are not accompanied by any averaging times.

1. Limits In Pounds Per Hour Only

Petitioner commented that the draft permit was not practically enforceable, because it contained several limits that are expressed only in pounds per hour and are not accompanied by any averaging times. These are:

- VOCs emissions from the PC Boiler [Pet. Ex. C, Draft Permit, Condition V.A.2.a(16)]
- Lead emissions from the PC Boiler [Id., Condition V.A.2.a(17)]
- Mercury emissions from the PC Boiler [Id., Condition V.A.2.a(18)]
- Sulfuric acid mist emissions from the PC Boiler [Id., Condition V.A.2.a(21)]
- PM emissions from the combustion turbines [Id., Condition V.B.2.a(2)]
- PM10 emissions from the combustion turbines [Id., Condition V.B.2.a(4)]

- VOC emissions from the combustion turbines [Id., Condition V.B.2.a(12)]
- Sulfur and SO₂ emissions from the combustion turbines [Id., Conditions V.B.2.a(5) - (7)]
- Sulfuric acid mist emissions from the combustion turbines [Id., Condition V.B.2.a(13)]
- PM, PM₁₀, SO₂, NO_x, CO, and VOC emissions from the firewater pump engine [Id., Condition V.O.2]

In response, NDEP stated that "[t]here is no requirement that additional permit limits or averaging times be imposed." Pet. Ex. I, Responses to ACE Comments, p. ACE-61. NDEP's response is legally incorrect.

BACT emission limits must be met on a continual basis at all levels of operation and must be enforceable as a practical matter. See U.S. v. Louisiana-Pacific Corp., 682 F. supp. 1122, Civil Action No. 86-A-1880 (D. Colorado, March 22, 1988); see 40 C.F.R. § 52.21(b)(17); see NSR Manual, p. B.56. According to the NSR Manual, ensuring that limits are met on a continuous basis at all levels of operation requires that the limits be expressed on an instantaneous basis (e.g., lb/MMBtu or ppm or percent reduction) and be enforceable as a practical matter (contain appropriate averaging times, compliance verification procedures and record-keeping procedures). NSR Manual, p. B.56. According to the NSR Manual, "[b]lanket emissions limits alone (e.g., tons/yr, lb/hr) are virtually impossible to verify or

enforce, and are therefore not enforceable as a practical matter." NSR Manual, p. c.4.

The NSR Manual also indicates that limits must be written "in such a manner than an inspector could verify instantly whether the source is or was complying with the permit condition." NSR Manual, p. c.4. Further, "it is best to express the emission limits in two different ways, with one value serving as an emissions cap (e.g., lb/hr) and the other ensuring continuous compliance at any operating capacity (e.g., lbs/MMBtu)." NSR Manual, p. H.5; see also NSR Manual, pp. I.2 ("minimum number of allowable emissions rates specified is equal to at least two limits per pollutant per emission unit"), I.4 ("[e]ach emissions unit should have at least two allowable emissions rates for each pollutant to be emitted.") Thus, NDEP's response that there is no requirement that additional permit limits or averaging times be imposed is incorrect.

Since a PSD permit must be enforceable as a practical matter, Petitioner commented that the permit should be revised to additionally express these limits in lb/MMBtu or parts per million. See U.S. v. Louisiana-Pacific Corp., 682 F. supp. 1122, Civil Action No. 86-A-1880 (D. Colorado, March 22, 1988); see 40 C.F.R. § 52.21(b)(17); see NSR Manual, p. B.56. Petitioner further commented that averaging times should be added to the pounds per hour limits, no longer than the length of the stack test that would be used to determine compliance. NSR Manual, p. H.10 ("[s]pecify test

method (citation) and averaging period by which all compliance demonstrations (initial and continuous) are to be made.”)

In response, NDEP disagreed. NDEP argued that “[i]t is widely accepted that for those constituents not continuously monitored, their compliance is demonstrated by the duration of a stack test.” Pet. Ex. I, Responses to ACE Comments, p. ACE-61. However, there is no obligatory length for a stack test. In the absence of an averaging time, for instance, a stack tester could select a short duration, too short to detect emissions, and report that emissions were not detected. Particulate matter, for example, is measured by collecting filterable material on a filter and weighing it on a scale. If the filter paper is not left in the gas stream long enough, the test may be too short collect enough particulate matter to measure using a scale. Thus, the duration of testing is normally established in the permit and expressed as an averaging time along with the emission limit itself. See 40 C.F.R. Part 60 (test methods).

Interestingly, NDEP’s response completely contradicted its response to Petitioner’s comment that the draft permit’s PM10 limit based on a 24-hour rolling average must be either justified or replaced by a 3-hour average in order to satisfy BACT. Pet. Ex. I, Responses to ACE Comments, p. ACE-21. In addition, NDEP provided no support for its opinion, which is a clear basis for remand to the agency. Finally, even though Petitioner did not comment that the duration of the stack test was needed, but only an averaging time,

NDEP stated that it does not need to state the duration of a stack test as a required averaging period. Pet. Ex. D, Responses to ACE Comments, p. ACE-61.

Thus, NDEP is non-responsive to Petitioner's comment and relies on a clear error of law.

2. The PM10 Surrogate Compliance Method Is Not Enforceable

Petitioner commented that the draft permit's PM10 surrogate compliance method is not enforceable. Pet. Ex. D, pp. 97-98. Petitioner provided a detailed analysis showing that the compliance method is not enforceable based on four specific reasons with specific cites to the draft permit. In response, NDEP stated that "[t]he permit adequately addresses compliance requirements" and that COMS will be used for surrogate compliance for PM/PM10. Pet. Ex. I, Responses to ACE Comments, p. ACE-62. NDEP's failure to respond to Petitioner's comments constitutes grounds for remand.

Specifically, Petitioner commented that the draft permit appeared to use a coal feed rate as a surrogate for PM/PM10 emissions from the PC boiler and a fuel oil feed rate as a surrogate for PM/PM10 emissions from the combustion turbines. The draft Permit required the calculation of hourly PM and PM10 emissions in lb/MMBtu from an emission factor and coal feed rate for the PC boiler. Pet. Ex. C, Draft Permit, Sec. V.A.4.c(5), p. V-9. It apparently intended a similar calculation for the combustion turbines,

including testing to determine the ratio, but no responsive emission limit. Pet. Ex. C, Draft Permit, Sec. V.B.4.a(12). The emission factor, the ratio of PM and PM10 to the tons of coal burned or the pound-mass of No. 2 distillate fuel burned, is determined in Condition V.A.4.a(14) for the PC boiler and Condition V.B.4.a(12) for the turbines. The amount of coal that is fired is continuously monitored in Condition V.A.4.b(1) and the amount of oil that is fired is continuously monitored in Condition V.B.4.b(1) and (2). Pet. Ex. C, Draft Permit, p. V-6.

Petitioner commented that NDEP's review of the permit is silent on the basis for this novel approach for determining compliance with PM/PM10 limits. Petitioner then set forth four specific problems with this approach.

First, the draft permit indicated that compliance with the PM and PM10 emission limits is to be determined by stack testing. Pet. Ex. C, Draft Permit, Sec. V.A.4.a(1) and (2), p. V-4. The calculation of PM/PM10 from an emission factor was identified as a recordkeeping provision. Pet. Ex. C, Draft Permit, Sec. V.A.4.c., p. V-9. The draft permit did not state that an exceedance of the calculated PM or PM10 emission rate, or any particular coal feed rate, constitutes a violation of the underlying PM/PM10 limit. The same was true for the combustion turbines. The final permit remains largely unchanged. Pet. Ex. A, Sec. V.A.4.a(1) and (2), p. V-4 and Sec. V.A.4.c., p. V-10.

Second, there is no evidence that there is a relationship between total PM or PM10 and coal feed rate for the PC boiler and fuel oil for the combustion turbines and many reasons to suspect there is none, e.g., PM/PM10 emissions are related to the ash content and sulfur content of the coal, not its feed rate. The ash content and sulfur content in the coal is highly variable within and between mines. See Pet. Ex. D, Ex. 42, Table PQ-1 and Exhibit 34 (coal quality data). The draft permit did not require any demonstration of a relationship between coal feed rate and fuel oil and PM/PM10 emissions. The final permit remains unchanged.

Third, even assuming there were a good relationship between coal feed rate and fuel oil and PM/PM10 emissions, the draft permit contained no requirement to revisit the ratio of PM/PM10 to coal feed rate or fuel oil flow determined in the two initial stack tests if operating mode, coal source, coal quality, or fuel oil quality are changed. The final permit remains unchanged.

Fourth, a stack test is not representative of PM/PM10 emissions during routine operation because stack tests are staged, planned events that occur following maintenance and tuning to assure the facility passes. Petitioner commented that a CEMS for filterable PM should be required. However, the final permit remains unchanged.

In sum, the final permit does not provide any method to assure that the PM10 BACT limit (or any other PM limit) is met continuously. Thus, the PM/PM10 limits are hollow promises. Moreover, NDEP completely failed to

respond to Petitioner's specific comments regarding the unenforceability of the permit. Thus, the Board should remand the permit to NDEP.

I. Recordkeeping And Reporting Are Inadequate

Petitioner commented that while the draft permit required recording and reporting of the results of some of the required testing and monitoring, the draft permit did not require such recordkeeping for all of the required testing and monitoring. Specifically, Petitioner pointed out that the draft permit did not contain any recordkeeping for VOCs, opacity of emissions from fuel storage, emissions of PM/PM10, SO₂, NO_x, CO, and VOCs from the diesel fire water pump. The draft permit also did not require that the performance tests for Systems 5 and 6 be submitted to the agency within 60 days of completion, as it does for the PC boiler and turbines. Pet. Ex. C, pp. V-24 to V-27. Finally, the draft permit also only requires that recorded information be submitted to NDEP once per year, except the results of performances tests, which must be reported within 60 days of completion for the PC boiler and turbines. Pet. Ex. C, Draft Permit, Sec. IV.C, p. IV-1. The final permit remains unchanged. Pet. Ex. A, Sec. IV.C, p. IV-1. Thus, the emission limits for these pollutants and sources are not enforceable.

NDEP summarily responded that the permit requires recordkeeping and reporting, which is necessary to determine compliance with emission limits. Pet. Ex. I, Responses to ACE Comments, p. ACE-63. NDEP's response is inconsistent with the law.

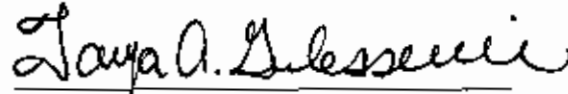
BACT emission limits must be met on a continual basis at all levels of operation and must be federally enforceable, which requires practical enforceability. See U.S. v. Louisiana-Pacific Corp., 682 F. supp. 1122, Civil Action No. 86-A-1880 (D. Colorado, March 22, 1988); see 40 C.F.R. § 52.21(b)(17); see NSR Manual, p. B.56. The NSR manual requires that a PSD permit "provide for adequate reporting and recordkeeping so that the permitting agency can determine the compliance status of the source." NSR Manual, p. B.56. The NSR Manual also recommends that "[c]ontinual and continuous emissions performance monitoring and recordkeeping (direct and/or surrogate) should be specified where feasible." NSR Manual, p. H.10.

Annual reporting is clearly not sufficient to ensure enforceability. The lack of prompt reporting limits the NDEP's and the public's ability to determine when and whether an enforcement action would be appropriate. Annual reports would allow violations to continue for up to a year before they are corrected. Citizens cannot gain access to records that are only maintained by the permittee. Therefore, this provision conflicts with the requirement of the Clean Air Act that allow citizen enforcement.

CONCLUSION

For these reasons we respectfully request the Board to review and remand this defective permit.

Respectfully submitted, this 1 day of June, 2005,



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